

The Nutritional Needs of People Living
With COPD: A Concurrent Mixed Methods
Study of the Role of the General Practice
Nurse

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Abstract

Background

Chronic Obstructive Pulmonary Disease (COPD) affects an estimated 1.2 million people across England, equating to 2% of the overall population. The respiratory disease can be diagnosed and managed in the community, the audit of which is one of the key quality indicators for General Practice. It is within this setting that general practice nurses have a key role in caring for people living with the disease.

Aim

This study aimed to examine the role of the general practice nurse in the diagnosis and management of nutritional care of people living with COPD.

Methodology

The study was guided by a pragmatic philosophical approach resulting in a mixed methods design to examine the role of the general practice nurse in the nutritional care of people living with COPD across Greater Manchester, UK. The quantitative phase utilised a questionnaire, to survey 201 general practices in phase one across Greater Manchester, which led to phase two of the research, where eight qualitative unstructured interviews across seven of the ten boroughs of Greater Manchester. Phase one of the quantitative data was analysed using SPSS Version 19. The qualitative data were analysed using the framework of thematic analysis as presented by Braun and Clarke (2006).

Findings

The survey of general practice nurses (GPNs) demonstrated that whilst there were similarities across general practices in Greater Manchester with COPD care (in line with the quality outcomes framework QOF), there was diverse practice relating to nutritional

care of the same group of patients. GPNs predominately perceived their practice, in the care of those living with COPD to align with an advanced or intermediate way (in line with the model by Upton et al, 2007). The qualitative interviews provided some context to practice with seven main themes emerging from the data including: biomedical task orientated care; financial drivers; time and resources; nutrition and COPD; confidence and diabetes care; inter-professional/nurse-to-nurse relationships and education; training; and role vulnerability. It was evident that the quality outcomes framework (QOF) influenced nursing practice across many of the themes identified in the analysis.

Conclusion

This is the first study to examine the role of the GPN in the nutritional care of people living with COPD in the community, and to discuss the impact of the QOF on the delivery of care. The care of people living with COPD in the community is largely undertaken by general practice nurses. Practice nurses provide care in accordance with the Quality Outcomes Framework (2004), that financially rewards practices for compliance, but is seen to inhibit holistic COPD care. Many participants lacked confidence when providing nutritional care for people living with COPD, which resulted in an assumption that such care should be aligned with another service or professional. A model to connect the person with their nurse, GP, dietitian and rehabilitation services could enhance a holistic and more rounded approach for COPD care, which incorporates nutritional practice as part of a whole person's treatment plan.

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Dedication

Finally, I would like to dedicate my thesis to my dad, Kevin Wilson, who sadly died 12 months into the start of this journey.

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Glossary of Terms

Term	Description
6Cs	A strategy, which was published NHS England and driven by Jane Cummings – the Chief Nursing Officer for England in 2012 – outlining the values essential to care delivery: care, compassion, competence, commitment, courage and communication.
Age UK	Organisation that was formed by the coming together of Help the Aged and Age Concern.
Anthropometric measures	Physical examination such as height and/or weight and fat mass composition using various methods to measure the human body in order to ascertain the nutritional status of a person.
APEL	Accreditation of Prior Learning – a process by which educational institutions partly award credits for previous academic or experiential learning towards a proposed programme of study.
ARNS	Association of Respiratory Nurse Specialists
BMI	Body Mass Index
British Association of Parenteral and Enteral Nutrition (BAPEN)	BAPEN is a charitable organisation of healthcare professionals who work to raise awareness of malnutrition and advance the nutritional care of patients in hospital and community settings.
British Medical Association (BMA)	Trade union and professional association for doctors and medical students across the UK.
BSc	Bachelor of Science academic award.
Care Quality Commission (CQC)	Independent regulator of all health and social care services in England.
CCG	Clinical Commissioning Groups created in 2012 and replaced Primary Care Trusts in April 2013 – responsible for the

	commission of health and social care provision for their local population.
Chronic Obstructive Pulmonary Disease (COPD)	Chronic obstructive pulmonary disease (COPD) is an umbrella term for a group of lung conditions, including bronchitis and emphysema.
Collings Report (1950)	A seminal report on the quality of care provided in general practice in the 1950s.
Doctors' Charter	The 1966 Family Doctors' Charter was the first charter to incentivise the move towards group practice.
ECG	Electrocardiogram
English National Board (ENB)	Responsible for the approval of nurse education and allied health programmes in England until 2002 when it became part of the Nursing and Midwifery Council's educational responsibility.
FBC	Full blood count
FEV1	Forced expiratory volume in one second
GDPR	General Data Protection Regulation – became law in May 2018.
General Medical Services (GMS)	The contract between general practices and NHS England for the agreement of what primary care services will be delivered.
GOLD	Global Initiative for Chronic Obstructive Lung Disease
GP	General Practice or General Practitioner
GPN	General Practice Nurse
Greater Manchester Combined Authority (GMCA)	The 10 local councils within Greater Manchester and a Mayor that work together with local services, communities and businesses to improve the regions of Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan.
HbA1C	A commonly used blood test to measure the glycated haemoglobin in the blood stream.

HEE	Health Education England – established in April 2012, this NHS organisation is responsible for planning, commissioning, recruiting and developing healthcare staff in England.
The King’s Fund	Independent charity working to improve health and care in England.
MA	Master of Arts academic award
MRC Scale	Medical Research Council Dyspnoea Scale
MSc	Master in Science academic award
MUST	Malnutrition Universal Screening Tool
NHS Confederation	The NHS Confederation brings together and speaks on behalf of all organisations that plan, commission and provide NHS services.
NHS Act 1948	The National Health Service Act came into effect on 5 July 1948. The Act provided the basis for a comprehensive health service for England and Wales.
NICE	National Institute for Health and Clinical Excellence – provides national guidance and advice to improve health and social care.
NMC	Nursing and Midwifery Council – regulators of the nursing and midwifery professions.
Nutritional care	There is no one single definition of nutritional care, in many instances it involves strategies to support the maintenance of or improvements in a patient’s nutritional status and what may be considered appropriate in one setting may not be in another. This research is aimed at exploring the general practice nurses’ practice and understanding of nutritional care and their current practice relating to this broad concept.
ONS	Oral Nutrition Supplements
Pulmonary cachexia	Can be a reversible condition that is responsible for the loss of peripheral and respiratory muscle function.

QNI	Queens Nursing Institute – registered charity with a principal aim of improving the nursing care of people in the community setting.
QOF	Quality Outcomes Framework – a voluntary reward and incentive programme for standardising and improving practice in primary care.
RCN	Royal College of Nursing – world’s largest nursing trade union and professional body.
RCP	Royal College of Physicians – represents over 35,000 doctors, and has an aim of promoting the best health and healthcare for all.
RGN	Registered General Nurse
SATs	Oxygen saturations
SP	Specialist Practitioner – academic and practice award recognised by the Nursing and Midwifery Council.
SPSS	Statistical Package for Social Sciences – software package that offers electronic statistical analysis of data.
Thematic analysis	One of the most common approaches to the analysis of qualitative data, which provides a framework for the recording of themes within a data set.
UKCC	United Kingdom Central Council for Nursing, Midwifery and Health Visiting, which became the Nursing and Midwifery Council in April 2002.

Preface

This research study was carried out between 2012 and 2018, and the thesis is written in the first person throughout, except in the presentation of the quantitative survey results in Chapter 4. During the the six years of this research, there was a considerable amount of political change and financial restraint both within the National Health Service (NHS) and across the Greater Manchester region. The rising demand for healthcare services across England was at record levels. The 70th anniversary of the creation of the NHS took place in 2018 and celebrated many successes achieved over the years. However, there have been ongoing reforms to the NHS in an attempt to continuously improve the patient experience and outcomes for a variety of conditions. These reforms have also attempted to balance the rising demand on the system. One key area of focus has been on general practice, with the continued concern relating to access to general practitioners (GPs), waiting times, diagnosis and referral for treatment. ~~Thus,~~ general practice has been expected to manage a larger portfolio of complex conditions, not only referring into secondary care but providing first-line treatment and ongoing chronic disease management. As someone with predominately secondary care experience, and a nutritional background to this experience, I wanted to understand the role general practice nurses have for people living with chronic obstructive pulmonary disease (COPD) and how nutritional care is incorporated into their management plans.

My interest in this area stemmed from my clinical background as a nutrition nurse working in an integrated community and acute care system, though principally managed by a hospital trust. I was involved in the care of people living with COPD, often visiting the respiratory ward to discuss the option of nutritional support, normally during an

exacerbation of their condition and frequently at the end of the patient's life. I wanted to try to understand the trajectory of the patient's journey and whether opportunities existed to provide nutritional assessment and subsequent treatment much earlier in the person's journey. It was evident that people were receiving a significant proportion of their chronic disease management within general practice and principally from a general practice nurse. Therefore, the focus of my research was to ascertain data in two phases, the first being a survey to explore the practice across Greater Manchester and the second phase being qualitative interviews, which initially had the aim of understanding the data from phase one.

Chapter 1 – Introduction

Chronic obstructive pulmonary disease (COPD) is an umbrella term for a group of lung conditions, which includes bronchitis and emphysema (BLF, 2016). The disease, often associated with breathing in harmful substances such as air pollution and tobacco smoking, came to the forefront of British medicine over 200 years ago (Reid, 1956). The British physician Charles Badham identified a number of respiratory disorders in the 1800s, which were later collectively defined as COPD (Mannino et al., 2006). Historically, Manchester in the United Kingdom was recognised as having the highest mortality rate from respiratory disease, with some suggesting this was largely due to the industrialisation in the 19th century, which resulted in the city being a world-leading producer of cotton, linen and coal burning steam plants (Mosely, 2013).

Cotton, linen and coal burning steam plants have been replaced by a significant increase in the use of motor vehicles and the use of wood burning fires. These are contemporary issues for governments to try to tackle, as both are seen as significant causes of reduced air quality and a risk to respiratory function and disease (Chafe et al., 2015). Alongside air quality and the effects of inhaled pollution, smoking is one of the other contributing factors associated with lung disease.

Whilst this research is about COPD and nutrition, it is recognised that smoking is one of the most significant contributory factors affecting those who are living with the disease. It is therefore considered important in helping to contextualise the issue and its relationship to the research, particularly as Greater Manchester's health strategy aims to reduce smoking in all age groups. Successive governments have reviewed the

evidence and attempted to tackle smoking with a number of national legislative policies (Doll and Peto, 1978; Poswillo, 1988; Doll et al., 1994; RCP, 2005; DoH, 2006, 2015). This has resulted in the introduction of a number of smoking bans in public or shared spaces as well as in motor vehicles with children; however, the most significant change has been in a change in culture regarding social acceptance of the habit (Graham, 2012).

Whilst there has been an overall decline in cigarette smoking from 10.0% of the population of England in 2012 to 7.9% in 2016, those from the most deprived neighbourhoods are still more likely to smoke (ON, 2018). The numbers of smokers within certain groups in England vary, with a sustained decrease in adults in England from 19.8% in 2011 to 14.9% in 2017; however, the picture for younger people is more concerning. There has been a gradual decrease in young people smoking from 1991 to 2014, but this has now plateaued at 19% (since 2014) and remained at this point, with the biggest rise in those trying smoking in the 14 to 15 years old age groups. The North West continues to buck the trend in smoking prevalence. Duncan et al. (1999) found that geographical area, social class, gender, years of schooling, employability and marital status are all patterns related to the likelihood of being a smoker. They found that socioeconomic status in the form of social deprivation resulted in a strong relationship with not only smoking but also its disease related effects, with Manchester and the North West previously being recognised as areas of high prevalence of not only deprivation but also smoking related illnesses (Duncan et al., 1999). More recently, the Office for National Statistics (ONS, 2018) reported that in Greater Manchester, one in five people are likely to smoke compared to one in 10 in the southern regions. The national statistics are supported by local data: Greater Manchester, which consists of 10 local authorities with an estimated population of 2.8 million people, recorded that

18.4% of its population smoke compared to a national average of 15.5% (GMHSCP, 2017).

The historical and more contemporary issues for respiratory disease are cited as contributing factors for the estimated 1.2 million people living with the disease across England (Rayner et al., 2017). COPD is the second highest cause of death from a respiratory disease diagnosis in the UK, only overtaken by those affected by lung cancer. The UK mortality rate is positioned third highest in Europe (Snell et al., 2016) and, like smoking and social deprivation, the North West has the second highest prevalence in England (ONS, 2018). The effects of living with COPD are well documented and include a cough, problems with breathing, increased risk of infection, reduced mobility and poor appetite. As the condition worsens, so does the difficulty in carrying out activities of daily living (Simon et al., 1990; Pauwels and Rabe, 2004; Vassilakopoulos et al., 2004; Wust and Degens, 2007; Von Haehling and Anker, 2014; Nielsen et al., 2015; Kwan et al., 2018).

Amongst Greater Manchester's 2.8 million population, there are 67,000 people living with COPD, which costs the health economy £73 million a year (Health Innovation Manchester, 2018). For those living with COPD, GPs and GPNs care for the majority so they are able to remain in their communities (RCP, 2016). Unfortunately, Greater Manchester (GM) has some of the most polluted areas for air quality, and the number of smokers is higher than the national average within England. Whilst the socio-economic picture has improved there remain areas of deprivation across and within the 10 boroughs of GM.

One significant area of concern is the nutritional status of those who are living with the disease. As Rawal and Yadav (2015) recognise, malnutrition and in particular pulmonary cachexia, affect an estimated 25%-40% of those living with the COPD. Although this form of malnutrition is normally associated with those living with severe COPD, low body weight can occur for those who are diagnosed with the condition and progress through the multiple stages of the disease (Schols et al., 1993; Vermeeren et al., 2006; Itoh et al., 2013; Anker and Larsson, 2016). The consequences of undernutrition in this group of people, is a risk of recurrent exacerbations of their condition, which Haehling and Anker (2014) and Rawal and Yadav (2015) believe ultimately leads to an increased risk of morbidity and mortality, where poor nutritional status is not addressed.

However, in order to identify and support those living with COPD who have a potential or actual nutritional problem, screening is recommended by using a validated nutritional screening tool. This should normally lead onto robust recommendations should a risk be identified, which would be facilitated and overseen by a healthcare professional (NICE, 2006). Screening is commonplace for those who are hospitalised as nutritional screening is now part of admission protocols and ongoing care as it is a key indicator of quality measured by CQC inspections criteria. What is not so clear is the extent of screening in community settings; despite the tireless work of Russell and Elia (2010, 2014) in trying to improve nutritional screening and identify those who are at risk, community settings were poorly represented in their screening week campaigns. This leads nutritional organisations to assert that 93% of malnutrition originates in the community, and in

many cases it remains largely undetected and untreated (Russell and Elia, 2014; Murphy et al, 2018).

Greater Manchester Combined Authority (GMCA, 2017) in its 2021 vision for health within the region not only recognises respiratory disease as an area for improvement but also that of malnutrition. The vision for health put general practice at the centre of achieving some of its ambitious goals to improving health (GMCA, 2017). It is therefore timely to explore what nutritional care is offered to people living with COPD by general practice. Therefore, the focus of the research within GM is deemed appropriate and underpinned by the problems associated with COPD and nutrition within the region.

Chapter 2 – Review of the Literature

Introduction

The aim of this chapter is to provide context for the research undertaken into the current knowledge and attitudes of general practice nurses (GPNs) in the nutritional care of people living with chronic obstructive pulmonary disease (COPD). The initial aim of the literature review was to explore the concepts of COPD, general practice and nutrition/nutritional care. It was evident that in utilising the key principles of a literature review (Booth et al., 2016) – defining the topic, searching the literature and gathering the literature relating to the specific question – my retrieval rate was low in relation to COPD and nutrition and the role of the GPN. For example:

Table 1: Example search strategy

Search terms (AND, OR, NOT) and truncation (wildcard characters like *)		<i>In the title: COPD</i>
		<i>All fields AND: General Practice / Nursing Care / Primary Care</i>
		<i>Abstract AND: Nutrition</i>
		<i>Not: Abstract: Diabetes / Hospital</i>
Databases searched	<i>Manchester Met library was used alongside, CINAHL, Scopus, PubMed, ProQuest (ERIC), British Nursing Index, Science Direct, The Cochrane library and Google Scholar. Websites of nutritional and respiratory organisations were also utilised, which included Association of Respiratory Nurse Specialists, British Association of Parenteral and Enteral Nutrition and European Society for Clinical Nutrition and Metabolism.</i>	
Parts of journals searched	<i>Title</i>	
	<i>Abstract</i>	
	<i>All fields</i>	

Years of search	<i>Originally 2010 to date using different combinations, Boolean and truncation, but the limit resulted in exclusion of key papers. A subsequent unlimited years search yielded key papers in 2004 and 2007.</i>
Language	<i>English</i>
Inclusion criteria	Unlimited years to date (because of under researched area of practice) COPD in title Nutrition in abstract General Practice Nursing Care Primary Care
Exclusion criteria	Hospital in abstract Diabetes in abstract
Results	(nursing care) AND (Title Combined:(COPD)) AND (nutrition) AND (general practice) 223 (Title Combined:(COPD)) AND (general practice) AND (nutrition) AND (nursing care) AND (primary care) 167 (Title Combined:(COPD)) AND (general practice) AND (Abstract:(nutrition)) AND (nursing care) NOT (Abstract:(hospital)) NOT (Abstract:(diabetes)) AND (primary care) Filter by Content Type 13

Given that mixed methods research is often viewed as emergent in nature (Hesse-Biber and Leavey, 2010; Hine, 2010), iterative reviews continued across the phases of the study in order to capture relevant literature to the themes emerging from the findings (eg in relation to QOF). Whilst this may not be a traditional approach to undertaking a literature review, it has helped me to gain a broader understanding of the topic area of general practice, COPD and nutritional care. The process has supported my pragmatic underpinning philosophy, and has enabled me to carry the core concepts of the review through to the discussion chapter to build upon the literature in light of my research findings (Noble and Smith, 2018). The emergent iterative process as described above (Table 1) was repeated for each of the topic areas within this chapter and I will start by discussing chronic health conditions.

The political landscape of healthcare provision is ever changing with the desire of all governments to offer the electorate something new, innovative and different from their predecessors. The last 70 years have seen the NHS evolve with not only technological advances but also service delivery, and the distribution of care provided in both secondary and primary settings. It is recognised that people living with chronic diseases are receiving more care at home and in many cases, the care relating to chronic disease management and specific treatment, is now widely offered by staff working in the community setting including general practice. It is important to understand the historical significance of how and why chronic disease management moved from secondary to primary care, in the context of general practice policy including the drivers of key indicators of care (General Medical Services contracts of 1990/2004 ; Dixon, 2004).

Whilst chronic disease management is now largely delivered and managed by primary care services, what is not so clear is what the care involves, and how nutritional support features in the overall management plans of people living in the community with chronic diseases. Taking COPD as an example, malnutrition and its impact on nutritional care for people with COPD has been a cause of concern in healthcare for decades. The relationship between malnutrition and underlying illnesses such as COPD has been examined in an attempt to ascertain if a deficiency in nutritional status has an impact on recovery from acute and chronic disease. Much of the research in the area of COPD and nutritional support has been carried out in secondary care where the identification of those suffering with malnutrition is frequently undertaken and in many cases identified as a problem. The focus of much of the research has been related to the physiological response to malnutrition and subsequent intervention providing artificial nutritional

therapy in the form of supplement drinks and/or tube feeding. Whilst a variety of patient groups have been studied over the years, including much literature relating to critical care environments, there has been an emergence of research into the effects of chronic disease, including cancer, and the impact on nutritional status for these groups of patients and the overall response to treatment.

Chronic Health Conditions

Long-term health conditions can include those living with type 1 and 2 diabetes, asthma, heart failure, COPD and dementia, and account for 30% of the population's ill health in England. They are more prevalent in older people with 58% of people over 60 living with a condition compared to only 14% under the age of 40 (King's Fund, 2015). Nearly three-quarters of all health spending is used on this group of people (George and Martin, 2016). The management of long-term health conditions accounts for 50% of all general practitioner (GP) appointments (King's Fund, 2015). However, it has not always been like this, the management of chronic health conditions has historically been co-ordinated and largely delivered by secondary care, where family doctors (GPs) would refer people for investigation to hospitals for a diagnosis and treatment plan and in many cases expensive hospital follow-up care (Schoen et al., 2007). Wagner et al. (1996) described the historical division between primary and secondary care physicians relating to chronic disease management as something that caused confusion, lacked co-ordination for the patient and in many cases communication between the sectors was poor.

However, in the early 1980s, when the care of some chronic conditions had been moved to general practice, concerns relating to the equity and quality of care between both

primary and secondary care providers were raised. A study by Hayes and Harries (1984) found that people living with type 2 diabetes who received care from their general practitioner, instead of a specialist hospital clinic, were more likely to present with an admission to hospital and experience poorer health outcomes. Studies like this fuelled scepticism within the sector regarding the ability of general practice to manage long-term health conditions in primary care prior to the agreement of the GP contract in the 1990s. However, following the agreement of the General Medical Council's contract in 1990 (DoH, 1990) Stuart et al. (1991) state that there was hope that closer collaboration between secondary and primary care, in the form of shared specialist knowledge, could improve chronic care health outcomes in the general population and in time keep patients out of unnecessary expensive secondary care. This will be discussed in greater depth later in this chapter.

Political Context of General Practice Policy

The NHS Act 1948 had aimed at uniting and coordinating the various elements of healthcare provision, including bringing the family doctor closer to hospital care by attempting to join up healthcare and integrate some of the provision. Hospitals worked very differently from GPs, who were essentially private contractors with few governance and reporting mechanisms in place. The NHS Act (1948) was seen as rather ambitious and whilst it delivered free care at the point of delivery, the desire to house GPs with other healthcare professionals in larger and less isolating centres in the late 1940s and 1950s proved too expensive (Lowe, 1998). This was because of the lack of infrastructure at the time and therefore the idea of primary and secondary services working together was deemed unachievable and dropped from the policy (Goodwin et al., 2011). UK

governments have attempted to respond to concerns regarding the general inequality in healthcare provision between primary and secondary care over the years. There have been a raft of measures aimed at improving not only access but also the provision offered by general practice, with an ultimate goal of offering care closer to home; however, resources have generally not kept up pace with demand.

Quality of General Practice in the UK

As far back as 1950, Collings' survey of general practice demonstrated a disappointing description of post-war healthcare, with family doctors working single-handed, with virtually no guidelines, and with a distinct lack of accountability within their communities and their secondary care medical colleagues (Collings, 1950). Collings, a field anthropologist, who had worked in New Zealand as a GP and latterly in Canada as a medical officer of health, undertook his observational study of general practice on behalf of the Nuffield Trust. The report presented a damning view of family doctoring in the UK and found that whilst doctors largely worked on their own with minimal guidance, their lack of partnership working resulted in them becoming deskilled and out of date with current practice. Petchey (1995a) reported Collings' (1950) belief that general practice was '...bad enough to turn a good doctor into a bad one within a very short time. Some [conditions] are bad enough to require condemnation in the public interest'; that inner city practices were '...at best... very unsatisfactory and at worst a positive source of public danger'; recommending "An attempt should be made to define the function of general practice within... the NHS. Group practice units... should be formed." (Collings, 1950 cited in Petchey 1995:40). However, there was criticism of the report, which only recruited 55 general practices to the study and therefore the

condemnation was aimed at its lack of generalisability to the general practice population (Petchey, 1995). The Nuffield Trust decided not to publish the report, only offering support for it after it was edited prior to its publication in the Lancet in 1950.

View of the General Practitioner

Post war also saw the emergence of smoking into European countries from the United States; much of post-war advertising presented images of family doctors and dentists promoting the habit, with many tobacco companies employing doctors to allay public concerns relating to the harmful effects of tobacco and the connections to respiratory disease (Gardner and Brandt, 2006). The view of the family doctor was beginning to become questioned, particularly in relation to their independence (Hunt, 1955) and devalued through observational studies such as Collings' in which GPs appeared defensive and protective regarding sharing their practice. Collings believed there was a lack of direction and clarity regarding their wider role in the overall strategy on primary healthcare provision (Petchey, 1995). Although there was criticism of Collings regarding the methodology and generalisability of the findings, the publication in the Lancet in 1950 was hailed as significant because it was the only paper that consisted of over 30 pages to be published by the journal at the time, which some believed added to its credibility and weight within the sector. Hospital provision did not escape criticism, with charitable and voluntarily hospitals being the first to be taken into local authority control under the guise of state ownership following the NHS Act (1948). This was because there were concerns regarding the quality and delivery of some hospital provision, particularly in how they were coordinated and often managed, with very little questioning of medical and nursing practices at this time (Greengross et al., 1999; Marshall, 2015).

General Practice Reform – Professional Registration

In 1966 the 'Doctors' Charter' was established, which significantly improved the contractual arrangements for GPs and attempted to address some of the failings of the NHS Act (1948). This was achieved by providing GPs with extra funding for the recruitment of some support staff and a capping of their patient list size to a maximum of 2000. There were financial incentives for GPs who worked together with others, which enabled doctors to provide 24-hour care and alleviate the pressure of out-of-hours working and the isolating nature of the role that resulted in the poor standards recognised by Collings in the 1950s (Rose, 2013). The Doctors' Charter (1966) along with the Collings' report (1950) were viewed by some within the profession to galvanise GPs into recognising the fundamental role they played within community healthcare and resulted in the formation of the Royal College of General Practitioners in 1972. The Royal College began to support the identity and influence GPs were to have within healthcare policy in later years. They also negotiated extra training for the profession, which according to Goodwin et al. (2011) resulted in them having a pivotal role in health promotion activities in the late 1970s.

Secondary Care – Poor Standards of Nutritional Care

Whilst the policy regarding general practice provision was evolving and the profession was coming together to demonstrate its importance within healthcare, concern was being raised about the poor standard of care in some hospitals. This was linked to what many in the field viewed as delivery of the basic principles of care for patients. One area

of concern was the nutritional status of patients and the poor provision of nutritional care and support at mealtimes whilst they were hospitalised. Bistrian et al., (1974) identified that up to 50% of surgical patients were malnourished on a small surgical unit within a district general hospital, as measured by triceps skin fold, mid-arm circumference and serum albumin levels. Two years on, Bistrian et al., (1976) replicated their study to incorporate patients from a medical ward, and again identified up to 43% of medical patients were displaying signs of malnutrition whilst in hospital. Interest within the UK in this area of practice, inspired by Bistrian et al., (1974), was furthered by Hill et al.'s (1977) study examining a group of surgical patients who were still in hospital one week after surgery. They identified that 50% of patients were displaying signs of malnutrition, which not recognised by their surgical teams; therefore, no interventions were put in place to address this deficit. These were significant findings at the time and have been widely cited within the literature ever since. However, although Bistrian et al., (1974, 1976) and Hill et al.'s (1977) findings appear to present a worrying picture of patients becoming malnourished in hospital, we now know from the work of Russell and Elia (2010) that 93% of malnutrition occurs in the community. However, it is how this is managed in hospital that still remains a contentious issue.

At the time, Hill et al., (1977) recommended greater emphasis on incorporating nutritional care into the patient's hospital treatment, which is now consistent with the work of NICE (2006) and Russell and Elia (2010, 2104) and is seen as important in both hospital and community care. The consequences of untreated malnutrition can be wide ranging for the patient, for example increased vulnerability to infection, delayed wound healing, delayed response to medical treatment (including medications) and extended length of time spent in hospital (NICE, 2006). However, little was done to understand

the complexity of malnutrition in the acutely unwell and there was no recognised tool to support practitioners in easy assessment at that time (Pennington, 1997).

Primary Care – Poor Standards of Quality – Reform

In the 1980s a number of views relating to community care were put forward (Acheson, 1985; Wilkin and Smith, 1987; Fry, 1988) demonstrating that despite the changes to GP contracts, there were still areas of concern: GPs working in isolation, a lack of a co-ordinated approach to care and in some cases, over or under referral to secondary care colleagues for support. Some GPs would refer patients without undertaking any formal assessments within general practice, and others would fail to refer on when all the local assessments indicated a need for higher-level care (Wilkin and Smith, 1987). The Royal College of General Practitioners embarked on a strategy to address concerns regarding the quality of care delivered by its members, with an aim of demonstrating improvements by attempting to engage in a quality initiative and respond to the political pressure being asserted towards the profession (Goodwin et al., 2011). Resistance existed among some GPs, who felt they still lacked adequate resources to undertake much of the growing demand on their services.

Reform – 1990 General Medical Services Contract

Simultaneously, the Thatcher Government recognised the significant financial pressure the NHS was under and urgently commissioned a review into its sustainability, which subsequently formed the basis of the white paper *Promoting Better Health* (BMJ, 1987). The Government planned to improve primary healthcare services, by financially

rewarding GPs for offering health promotion, immunisations and the management of some long-term conditions. However, the Thatcherite plan came at the cost of the abolition of free eye tests and dental care to fund general practitioners undertaking this activity (British Medical Journal, 1987).

The Royal College of General Practitioners worked with its members, who were initially suspicious of the plans, particularly the increased workload. However, they managed to achieve an agreement with both their members and central government, to improve performance, by financially rewarding those practices that undertook a greater amount of public health activity. Initially, the general practices that undertook screening for height, weight and blood pressure and those that specifically ran health promotion clinics received incentive payments through the creation of the new GP contract, but this was in exchange for greater scrutiny and accountability of provision (DoH, 1990). There were many within the profession that believed the 1990 contract was imposed upon general practitioners as it formed part of wider healthcare reforms associated with financial restraint and the concept of purchaser-provider initiatives and value for money. Some viewed that it should have principally been about public health improvement (Calnan and Williams, 1995; Lewis, 1997).

Marketisation of Healthcare

It could be suggested that the marketisation of healthcare was a result of the Government publishing its white paper *Working for Patients* in 1989 (DoH, 1989), which was the birth of the 'internal market' within the NHS. The term efficiency was cited throughout the white paper and its aim was to drive up standards for patients by

offering greater choice, competition and, through comparison, between healthcare providers. The white paper proposed seven key changes to healthcare provision, of which general practice formed a significant part of the legislation. GPs with more than 11,000 patients could opt to manage their own budgets and become fundholders and purchasers of care for their patients (Roberts, 1989). Fundholders were able to purchase NHS and private treatment both within their locality and outside of their regions. The concept was aimed at creating competition within both secondary and primary care, with general practice becoming the gatekeepers of provision (Propper et al., 2002). Hospitals would bid for contracts from general practice fundholders, which were thought to offer greater value for money and drive down unit prices. It also created movement within general practice, as patients began to move between practices, away from those that were smaller and run by single GPs because of the assumption that that would give greater access to a wider range of services with fundholders (Dixon and Glennerster, 1995; Petchey, 1995). The Government's overall aim of the policy was to drive up standards, reduce waiting times across the NHS and get GPs to work together, which they believed would improve activity and ultimately reduce costs (DoH, 1989; Roberts, 1989).

GP Fundholding – Spotlight on Secondary Care

The 'internal market', where GPs purchased care on behalf of their patients, was blamed for some hospitals cutting services that were no longer financially viable. GPs could choose to commission care from the cheapest provider, or indeed provide care through consortiums of community practices. Robinson (1996) recognised that whilst one of the aims of this strategy was to drive up standards, a consequence of the policy resulted in

GPs demanding greater efficiency from hospitals including the admission and discharge of patients within a timely manner. One area that hospitals grappled with was caring for those patients with multiple co-morbidities. Patients who were admitted from their communities and lived with chronic disease were often malnourished and, as a consequence, often remained in hospital for longer periods. These increased costs for chronically ill and malnourished patients for secondary care providers was directly attributed to longer hospital stays, for which hospitals were not reimbursed under the current funding structure (Lennard Jones 1992; Chima et al., 1997; Barker et al., 2011).

The Cost of Malnutrition to Secondary Care

Despite the correlation between malnutrition and the length of hospital stay, concern continued about the care of some groups of patients in hospitals, particularly those who required nutritional support. Whilst studies were beginning to demonstrate the connection between increased costs to hospitals for those suffering with malnutrition, Lennard Jones (1992), on behalf of the British Association of Parenteral and Enteral Nutrition (BAPEN), published a report outlining the issue of malnutrition, its effects on recovery and a number of methods of treatment. The report acknowledged that nutrition should be a fundamental part of a patient's treatment plan and should go hand in hand with their medical interventions. Lennard Jones' (1992) report was distributed to every hospital in the country; however, with a lack of a coordinated approach across hospital teams, combined with the over complicated interventions, little change occurred.

A larger scale study, again in a hospital setting, reviewed 500 patients entering and leaving hospital following their treatment in areas such as surgery, general medicine, respiratory medicine, orthopaedic surgery and elderly health (McWhirter and Pennington, 1994). This seminal study demonstrated that nutritional care was not seen as a priority to accompany medical and surgical treatments despite the researchers identifying that 40% of the patients (n=200/500) were admitted with some form of undernourishment. McWhirter and Pennington (1994) suggested this was because there was a lack of a coordinated approach in identifying malnutrition, with no routine screening undertaken on all patients at admission. A proportion of patients who were discharged from hospital (112) displayed on average a 5.4% further weight loss following their hospital stay, further compounding their overall nutritional status and reflecting a lack of intervention whilst in hospital. Interestingly, the authors suggested that much more could be done to address the nutritional status of patients prior to admission to hospital, and they recommended that GPs could do more within primary care to identify and treat patients with signs and symptoms of malnutrition (McWhirter and Pennington, 1994). However, some saw this as an excuse to pass the problems that were being experienced by secondary care providers to the primary care setting, when hospitals actually did not have strategies in place to meet the nutritional needs of the patients they cared for (Age Concern, 2016; BAPEN, 1994; ACHC, 1997).

Opportunities of Fundholding

Whilst poor nutritional care was continuing to affect hospital provision, fundholding gave general practitioners the opportunity to work together, and in turn improve their sector and expand their workforce to provide a wider range of services. They were able

to recruit administrators and more nurses to support the development of the contract and the subsequent increases in workload that were required, in not only offering additional services but also reporting the newly targeted government health outcomes within the contract (Sibbald et al., 2000). One key element of the contract was elective care, including chronic disease management and minor surgery, which the Government believed could be managed by general practice (Mays et al., 2000).

GP fundholders purchased specialist care for their patients, with some practices offering immediate access to treatment, including a range of physiotherapy and dietetic services. However, not all practices came on board with fundholding and particularly those GPs who worked alone were seen not to engage in this policy. This resulted in a two-tier system, with those people who were registered with a GP that was not fundholding often waiting much longer to access some secondary care services than their counterparts in fundholding surgeries. This was because secondary care was seen to prioritise contracts with fundholders in order to continue to generate income and maintain hospital services. It was hardly surprising that GP fundholders demonstrated improvements in various public health initiatives such as cervical smears, child health and provision of other specialist services such as physiotherapy.

However, not all people at fundholding practices received quicker access to secondary care services; Croxson et al. (2001) had suggested that in some areas there was a difference between fundholding and local authority commissioned services. In fact, there were those that believed fundholding GPs would reduce the rate of referral to secondary care, in some cases inappropriately, to retain the budgetary surplus (Dusheiko et al., 2006). The inequity of resource allocation caused significant conflict

among patients, the public and within the profession, which resulted in the Government giving more control to health authorities to attempt to create uniform care across the two systems (Beecham, 1997).

A New Era of the NHS

In 1997, New Labour came to power and promised to abolish the internal market, competition and GP fundholding, and create an NHS that would work together for the benefit of patients. Labour believed that the NHS required significant investment and following one of the worst winters the NHS had experienced, the Labour Government pledged to reform healthcare services. They wanted to tackle the disparity between fundholding and local health authority commissioning and provide greater support for people in the community so as to reduce the demand on hospital services.

The King's Fund (Thorlby and Maybin, 2010) recognised the significant under investment in the NHS pre-1997 and whilst GPs had improved various areas of public health and vaccination rates under the 1990 contract, there was little progress seen for people with chronic conditions, particularly in the self-management strategies designed to prevent hospital admission (Thorlby and Maybin, 2010). The modernisation of health services was beginning to take shape and an agreement was achieved with general practice, which would pave the way for GPs to manage more care in the community, specifically for those with long-term conditions (DoH, 1990). The strategy and subsequent contract provided financial incentives for GPs who carried out health promotion and prevention and management of long-term conditions, with an aim of keeping people fitter for longer and out of hospital.

Unfortunately, the 1990s saw further negative news relating to nutrition in secondary care with a publication from The Association of Community Health Councils (ACHC) (1997). The ACHC (1997) recognised through the experiences of multiple patients and service user groups that nutritional care was continuing to decline in hospitals, with issues relating to quality, quantity, choice of food, physical assistance at mealtimes and the lack of utensils provided to support food consumption all being seen as inadequate. McWhirter and Pennington (1997) believed the concern raised by the ACHC (1997) was justifiable, and recognised that despite the work already carried out by BAPEN in the early 1990s, little had changed in the form of improvements in hospital food provision. Unfortunately, BAPEN's work continued to focus largely on artificial routes of feeding and the medicalisation of nutrition rather than focussing on the fundamental issue of basic principles of oral food as a preventative treatment (Lennard-Jones, 1992).

Reform of Chronic Care

Meanwhile the policy of GP fundholding, which was widely blamed for the lack of a uniform approach to chronic care in the community, was finally abolished in 1999 with an aim of replacing this policy with a better co-ordinated and consistent approach to community services (Ham, 2009). The King's Fund (Damiani and Dixon 2002) in their report on emergency hospital admissions in London 1997-2001 found the highest rate of admissions were associated with older people suffering an exacerbation of COPD. Whilst highlighting a number of reasons for this, they suggested that there could be a 'poorer quality of primary care available'. The King's Fund (2004) further supported this assertion reporting a lack of community services for chronic disease management and

cited a historical lack of interest from GPs, blaming the complex funding structure, which provided very little incentive for GPs to participate in this area of practice. However, one area of success in which GPs were rewarded for their participation was smoking cessation (practices commonly engaged in this activity) which in many cases was offered to people living with COPD (McEwen and West, 2001; Colman et al., 2007).

General Practice, Nutrition and Chronic Care

Despite the agreement with GPs to manage more care in the community, and specifically for those living with long-term conditions, a MORI (1998) poll of GPs demonstrated a significant lack of awareness and knowledge of disease related malnutrition and subsequent treatment required to address its effects in the community population. Sixty per cent of GPs felt that they needed further training in malnutrition and 74% of GPs had received no undergraduate training relating to this area of clinical practice. Whilst it is recognised that not all patients who are admitted to hospital have been receiving care from their GP, it is acknowledged that a significant proportion of hospital admissions are those who are older and often living with co-morbidities and long-term health conditions (Purdy, 2010). During 1998/1999, the National Audit Office (NAO, 2000), recorded 5.75 million people admitted to hospital; and of this figure, two-thirds were emergency admissions. The NAO (2000) identified that a significant proportion of these patients admitted to hospital were older, often with multiple co-morbidities who had been in receipt of care from their GPs and in a number of cases referred directly for the next level of care that only a hospital could provide.

It came as no surprise that studies focussing on patients in secondary care had identified that a large proportion of patients were displaying signs of malnutrition on admission to hospital. As Schols et al. (1993); Vermeeren et al. (2006); Itoh et al. (2013); and Anker and Larsson (2016) acknowledge, people who are living with COPD are more likely to be affected by malnutrition. This is because of the physiological and social effects of the disease process on their ability to consume an oral diet because of the need to breathe and the catabolic effects of COPD, which prevent people from metabolising nutrients effectively. More recently, Steventon et al. (2018) reported 14% of all emergency admissions in 2015/16 were those living with long-term conditions such as COPD. They further suggested that many of these patients had received care from their general practice; however, a proportion of those ended up in hospital because they could not access primary care services when they experienced an exacerbation in their condition.

Still Attempting to Tackle Nutritional Care in Hospital

Following the MORI (1998) poll of GPs and the ACHC (1997) report, the Department of Health (DoH, 2001) responded with an array of publications, which were primarily focussed on the deficiencies in hospital nutrition. This initially included the Essence of Care (DoH, 2001) clinical benchmark for nutrition and led to the widespread adoption of hospital protected mealtimes and red trays for the most vulnerable patients. However, patient groups felt there was still a lack of progress, particularly for older people who were malnourished in hospital and did not receive the nutritional care they required (Age Concern, 2006; Age UK, 2010). NICE (2006) published their first guideline relating to oral, enteral and parenteral nutrition; however, they again largely focussed on

hospital provision and the use of artificial intervention such as tube or intravenous feeding.

NICE (2006) subsequently reviewed their guidance to incorporate the community perspective. BAPEN was a key stakeholder of these guidelines and fundamental to their development. Whilst they are a very top-heavy organisation of doctors interested in nutrition, which some may suggest created the medicalisation of nutrition support, they soon began to realise that although nutritional care in hospitals needed to improve, it was only part of the solution. The nutritional screening weeks that BAPEN carried out (Russell and Elia 2010, 2014) suggested there was a problem with malnutrition outside of the hospital setting; this was difficult to detect and quantify because of the lack of awareness and a coordinated approach in the community.

Providing Care Closer to Home

The healthcare reforms of the Thatcher years were aimed at providing healthcare closer to home; this resulted in the diagnosis and management of chronic disease moving from hospitals to general practice. There were pockets of local initiatives across the country reported; a number of studies demonstrated how shared working between secondary and primary care relating to chronic disease management (under the 1990 GP contract) could positively influence those living with long-term conditions. For example, GPs with a specialist interest in diabetes were educated by hospital consultants and specialist nurses to provide care in the community (McCulloch et al., 1994). Katon et al. (1995) demonstrated how successful collaboration and shared purpose could benefit a group of patients who suffered with major depression. A consultant psychiatrist supported a

primary care physician in developing specialist skills to improve knowledge and understanding of the management of the condition, subsequently improving treatment and overall patient satisfaction in the community (Katon et al., 1995). However, despite these initiatives, Wagner et al. (1996) believed there was a disparity between primary and secondary care as well as between local community providers for those living with long-term health conditions regardless of their diagnosis. This later became a focus for the development of future healthcare policy.

The Labour Government (1997-2007) wanted to bring greater accountability and uniformity, and improve standards within the NHS by giving local communities a greater say in their healthcare provision. *The NHS Plan* (DoH, 2000) was published with an overarching aim of radically improving many areas of the health service including community services and general practice. GP services were to receive significant investment, including the recruitment of more doctors and nurses to improve access and the range of services offered. The Plan outlined that GPs would further develop the range of provision in relation to health promotion and screening, to include other conditions as well as widening the care and management of a greater number of chronic conditions. However, the increased investment came with an array of complex changes, reorganisation and targets, including greater competition and the acceleration of private finance, which some believed was promoting, not abolishing the internal market created under the previous Conservative Government (Brereton and Vasoodaven, 2010).

A Stronger Community Focus

Separate community trusts were to be established to assume overall responsibility for the commissioning of community services, including purchasing care on behalf of general practice. The notion behind the creation of specific community trusts was to redistribute funding to community services and give them greater influence in the provision of healthcare services, which had been seen by some as Cinderella services for many years (Bloor et al., 2000). Primary care trusts attempted not only to purchase care for local communities, but also to provide governance, accountability and some clinical care such as district nursing, health visiting and some newly developed teams such as community matrons responsible for the management of long-term conditions. These were considered to be a fundamental part of the NHS Plan to care for people closer to home and for those that were deemed not to require admission to a hospital setting (DoH, 2000). The NHS recognised that the management of long-term conditions still required further improvement and set out multiple strategies to tackle the inequality between and within chronic disease groups.

Refocussing Nutritional Efforts in Healthcare

At a similar time, BAPEN undertook their first nutritional screening campaign and received data from 175 hospitals, 173 care homes and 22 mental health units within the UK (Russell and Elia, 2007). They found that of 9336 patients who were screened on admission to hospital, 28% had a risk of malnutrition, which was present on admission or shortly after admission to hospital. They concluded that malnutrition or the risk of undernutrition originated in the community and that whilst the focus should be on addressing this identified problem during hospital stays, there needed to be a much

larger debate relating to strategies for primary care (Russell and Elia, 2007). Despite the publication of the nutritional screening week data and high profile campaigns in 2007, 2008, 2010 and 2011, the identification of people living with malnutrition in the community continued to remain static with no real decline in prevalence.

Whilst it is recognised there has been an ongoing problem for many decades with the nutritional care of patients in hospitals, many strategies created to address this problem have been simultaneously compounded by others, in the drive to modernise healthcare services and cut the length of time patients spend in hospital. Age UK (2010) recognised a failure in policy in their updated report *Still Hungry to be Heard*, suggesting that whilst there had been some small improvements in hospital provision, older patients in particular remained vulnerable to the effects of worsening nutritional status whilst in hospital and leave hospital more malnourished than when they arrived.

Modernisation of the NHS

UK governments have driven the modernisation agenda in England; seeing the transformation and redesign of services over the past two decades, principally in an attempt to reduce the length of time patients spend in hospital (Martin et al., 2016). The strategy was aimed at freeing up capacity within the hospital system and providing a more efficient journey for patients whilst attempting to utilise care in the community. This strategy has seen the NHS improve some of its discharge rates and reduce its length of stay for many medical and surgical interventions; as a result greater utilisation of its bed stock has been reported (NHS Confederation, 2005; Martin et al., 2016). This has enabled the NHS to reduce the number of hospital beds, which has fallen in the last 20

years by 31% from 211,617 in 1984 to 145,218 in 2004 in support of this initiative. It has resulted in bed occupancy rates of hospitals rising because of less capacity, and patients moving out of hospital more quickly than in previous decades because of the assumption that general practice and community services would manage care thereafter (DoH, 2000). Therefore, attempting to deal with signs of malnutrition and reversing its effects in the hospital setting when patients are moved through the system more quickly than ever before could be seen as unachievable. This is because patients who are malnourished but medically stable in a hospital setting are deemed fit for discharge by the policies and protocols, despite concerns for the patient's nutritional status (Laur, 2018).

A Failure of Nutritional Healthcare Policy

A number of studies have demonstrated that despite hospitals identifying that anywhere up to 63% of patients admitted to hospital were malnourished, of those that remained in hospital for up to seven days, the same proportion were discharged in the same malnourished condition in which they were admitted (Barker et al., 2011; Allard, et al., 2015, 2016). This was largely put down to the focus on medical care taking priority over the patient's nutritional status, rather than in conjunction with it. Barker et al. (2011) and Allard, et al. (2015, 2016) recognised that when people are acutely unwell they often experience poor dietary intake due to their physiological symptoms and medication related interventions interfering and affecting their appetite. Therefore, the initiatives put in place by the Department of Health, NHS and government to address the problem with hospital malnutrition over the decades has potentially been

undermined by the parallel approach to modernise the delivery of hospital provision, with what appears be a lack of community recognition.

Russell and Elia (2010) have recognised that previous work on behalf of BAPEN was predominately medically orientated in its approach. The organisation predominately run by its membership of doctors decided to change the ethos of the group and in turn its strap line from *Advancing Clinical Nutrition* to incorporate a more holistic and community based vision of the malnutrition agenda to *Putting Patients at the Centre of Good Nutritional Care* in 2013. Whilst this may seem a simple gesture, it came alongside the appointment of a GP on their council executive, to demonstrate that community malnutrition was to be taken seriously. It was through BAPEN's nutritional screening week campaigns that they identified more than 3 million people living with the effects of malnutrition in the UK with 93% in the community (Russell and Elia, 2014). Whilst BAPEN (Russell and Elia, 2014) have continued to undertake their nutritional screening week campaigns each year since 2007, and have recognised some improvements in awareness and subsequent treatment of malnutrition in hospital care, they have failed to make inroads in the community problem. BAPEN now robustly supports the notion that much of the problem originates in the community, where the scale of malnutrition is unfortunately largely undetected and in many cases unknown. This is because of the difficulty co-ordinating and managing such a complex problem, when people may not be known to community healthcare services until their admission to hospital.

The Future of Chronic Disease Management

The NHS Improvement Plan published in 2004, specifically set out chronic disease management as a priority of care and one of its key parts relating to general practice was to implement 'disease management by primary care teams for people with conditions that could be controlled through regular contact with a family physician, nurse, or other team member' (DoH, 2004). The same year, the Plan and many of its aims complimented the Government's renegotiated GP contract, whereby general practices would be expected to provide a better co-ordinated approach for up to 10 chronic conditions, and in return they would be financially rewarded (DoH, 2004). However, to implement this contractual payment system and encourage GPs to engage in this activity, the Department of Health was required to set up guidelines for the framework of care; this was the inception of the Quality Outcomes Framework (QOF, 2004). The framework was a way of being able to monitor performance against a backdrop of indicators, which essentially paid general practice for improving performance with a hope of preventing people from being unnecessarily admitted to hospital.

However, managing public health and long-term conditions in general practice aligned to a specific framework was a significant sea change and one that required additional resources, particularly in the form of general practice nurses. The GP contract in 1990 (DoH, 1990) started this approach and was further built upon in the subsequent update in 2004 (DoH, 2003a); both reforms permitted GPs to recruit a range of staff to support this activity, particularly nurses. However, the acceleration in recruitment of nurses into

general practice really took off following the agreement in 2004, because many GPs saw a role in nurses supporting them to meet the contract and ultimately generate income.

The History of General Practice Nursing

When nurses began to be employed within general practice, soon after the creation of the NHS Act (1948), they were overwhelmingly part time, and worked within a very limited scope of practice. Cartwright and Scott (1961) recognised that general practice nurses (GPNs) were unlikely to have been employed on a large-scale basis across primary care because of the unaffordability of the role and the lack of clarity regarding what their purpose or possible benefit would have been at that time. Mathewson (1968) supported this view recognising that very few general practices had nurses working with GPs and put this down to how GPs struggled to afford ancillary staff, let alone nurses, within their practice. However, the interest from the public post the NHS Act (1948) began to grow, with many wanting access to primary care services, and so demand for general practice to treat minor ailments became common and as such, Mathewson (1968) believed the provision of general practice required urgent rethinking. Throughout the 1960s and 1970s, where nurses were employed they would generally undertake limited and specific clinical tasks but also carry out administrative and reception duties, which included the maintenance of surgery equipment and the stocking up of the GP's medical bag (Cartwright and Scott, 1961; Poulton 1997; Carey, 2000).

The government at the time wanted to make general practice more accessible to the general population; consequently, where GPs recruited and managed nurses directly, they received up to 70% towards the cost of a nurse's salary from the NHS. This incentive

was aimed at developing the GPN role and supporting their integration into the general practice environment (Reedy et al., 1976). The emerging concept of a primary healthcare team, which mirrored some of the components of hospital care, was mooted in the 1960s and resulted in its inclusion in the *Health Services and Public Health Act 1968* (Reedy et al., 1976). As a consequence of the Act, local area health authorities began attaching nurses not only to local communities in roles such as district nursing, but also within general practices as part of localised pilots.

These pilots were 'rolled out' after 1970 and resulted in 2,654 GPNs working across 7,312 practices; however, 24% were initially directly employed by the practice with the remainder working as an attachment from local health authorities. The health authority attachment nurses only spent on average two hours per week in the general practice setting, which resulted in a lack of identity and progression for the practice nursing role (Reedy et al., 1980). The average working hours of those nurses employed directly by the general practice was 23 hours a week, which gave them the ability to define their contribution to general practice (Reedy et al., 1976). The disparity between the two nursing routes (particularly the attachment nurses who formed the largest proportion at this time, but spent the least amount of time working with GPs) resulted in the delegation of tasks and advancement of the practice-nursing role across the country being slow to materialise (Bowling, 1981).

The Distribution of Work within General Practice

Bowling (1981) recognised that the medical profession, and in particular GPs, were beginning to acknowledge the role nurses could play within general practice and some

began to delegate medical duties to them. These roles included venepuncture, ear syringing and the incision of boils; however, some doctors within the profession and a number of patient groups felt this threatened the independence and role of the doctor. Bowling (1981) found there was anxiety among medical colleagues about the advancement of nurses in general practice, predominately from GPs who had trained prior to 1960. The same group of doctors who had concerns about nurses undertaking some of their duties also expressed views about working alongside other doctors, let alone nurses, and believed it threatened their independent and autonomous position. Mackereth (1995) recognised that practice nursing, although increasing in popularity through the 1980s, had difficulty in advancing the role because of the powerful hierarchical position doctors held within the healthcare workforce. Many did not want nurses engaging in health promotion, screening, diagnosis and treatment of patients. Bowling (1981) and Miller and Blackett (1980) identified that some GPs felt that a doctor should carry out specific interventions because of the training they had received.

Mackereth (1995) held the view that this was why certain tasks could not be delegated to nurses, particularly because they lacked formal recognised training in many of these areas of proposed delegation. As nurses did not formally require an additional qualification, or indeed standardised training, for the role at this time, it played into the hands of the sceptics regarding extending the nursing role in this area of healthcare practice. There was indeed little recognition by the regulatory authority at the time regarding specific post-registration training and qualifications. Fanning and Berry (2016) described a historical picture of practice nursing, as one that offered family friendly part-time hours, where many worked within their local communities close to their homes and appeared happy with the flexibility and level of recognition of the role.

A Growth in Numbers of General Practice Nurses

With the implementation of the GP contract (DoH, 1990) and the requirement for GPs to offer a broader range of health promotion activity, the numbers of nurses working within general practice rose compared to pre-1990 (Atkin et al., 1993). This was because some GPs recognised the role of the GPN as one that could help them achieve this additional activity with limited financial impact on their budgets (Aitkin et al., 1993). A pioneering nurse in the late 1980s saw an opportunity to take advantage of emerging health policy and advance the role of the practice nurse (Stillwell, 1988). Barbara Stillwell believed that nurses could make a real difference in general practice and work at an advanced level, providing first contact care and reducing the increasing burden of access on GPs. Stillwell (1988), working in partnership with the Royal College of Nursing, developed the first accredited nurse practitioner programme in the UK. However, with the growth in numbers of GPNs directly employed by GPs and a move from the health authority attachments, Mackereth (1995) recognised conflict within the wider primary healthcare team.

District nurses and health visitors believed that some GPNs were eroding a number of their roles within primary care without specific training to support this. Whilst not all GPNs undertook home visits, a number did, and this was a cause of contention for other nursing roles in the community. The GP contracts (DoH, 1990, 2004) initially required general practices to offer care for those people living with diabetes and asthma but subsequently expanded this to include a further eight chronic conditions, one of which was COPD from 2004 onwards. Whilst the concept of the nurse practitioner role began

to develop to lead and manage the advancing role of the nurse in general practice, it was a number of years before health and professional policy began to drive forward the concept of both roles within the sector (DoH, 1992, 2004, 2010; RCN, 2012a,b).

Ross et al. (1994) recognised that following the implementation of the 1990 contract, the majority of nurses in the South West regional area were undertaking a variety of clinical activities, including assessment, planning and implementation of care, but lacked the formal development to support this change in practice. It was acknowledged that the majority of GPNs questioned in their study were caring for people with diabetes but only 1% had been on a recognised course to support this work. However, historically nurses who wished to work in general practice were required to have gained a degree of post-registration nursing experience. This was usually undertaken in secondary care environments and, as Fanning and Berry (2016) point out, nurses often came from areas such as critical care, ward environments and community nursing roles with a significant degree of clinical experience. However, despite this experience Fanning and Berry (2016) recognised that nurses struggled with the transition from secondary care, where they were often well supported by other nurses, to working autonomously and often in isolating environments. Ross et al. (1994) found the majority of GPNs expressed a wish to develop their practice both clinically and theoretically with counselling skills being a prominent area of interest. However, as Ross et al. (1994) revealed, the majority of nurses were unable to balance their development with the ever-increasing demands of the service; and one could suggest this supported the views of the district nurses and health visitors who believed GPNs did not have the qualifications or the experience to support their role.

It was recognised that criticism from other areas of the primary care sector, and an increase in workload and diversity within general practice, required action to formally recognise the important role GPNs play in the primary care workforce. As Stilwell (1991) acknowledged, education and training for GPNs was traditionally poor, with no recognised national qualification and in many cases, as discussed above, practitioners' development came secondary to the demands of the service. Prime (2003) recognised how GPNs were historically subjected to an uncoordinated and varied approach to their development, which often differed depending on what region of England they worked in. An explanation for this inconsistency could be explained by nurses being employed directly by GPs who were essentially private employers, and as a consequence GPNs did not have access to the opportunities their NHS counterparts were afforded (Carey, 1996; Hawksley, 1997).

The Scope of Professional Practice

The criticism by district nurses and medics that GPNs did not hold formal qualifications to work at a more autonomous or advanced role at that time, was partly addressed in the United Kingdom Central Council Scope of Professional Practice (UKCC, 1992). The scope was based around six key principles as seen in Table 2; these principles were viewed by some as providing nurses, midwives and health visitors with the opportunity to expand their roles within the premise of the framework. The Royal College of Nursing (Savage and Moore, 2004) viewed the Scope of Professional Practice as a great opportunity for nurses to become truly autonomous practitioners by providing them with the authority to expand their roles as long as they took accountability for their competence and development.

Table 2: The principles of the Scope of Professional Practice

The registered nurse, midwife or health visitor	
1	Must be satisfied that each aspect of practice is directed to meeting the needs and serving the interests of patients or clients
2	Must endeavour always to achieve, maintain and develop knowledge, skill and competence to respond to those needs and interests
3	Must honestly acknowledge any limits of personal knowledge and skill and take steps to remedy any relevant deficits in order to effectively and appropriately meet the needs of patients and clients
4	Must ensure that any enlargements or adjustment of scope of personal professional practice must be achieved without compromising or fragmenting existing aspects of professional practice and care and that the requirement of the Council's Code of Professional Conduct are satisfied throughout the whole area of practice
5	Must recognize and honour the direct and indirect personal accountability borne for all aspects of professional practice, and
6	Must, in serving the interests of patients and clients and the wider interests of society, avoid any inappropriate delegation to others which would compromise those interests
UKCC, 1992a	

For nurses to be able to expand their roles and develop into areas of healthcare traditionally practised by other disciplines, support from others was required, principally the medical profession (Cowan et al., 2007). Unfortunately, there was a lack of

recognition for the Scope of Professional Practice by the medical profession at the time. The British Medical Association (BMA, 1996) published *Protecting Patient Safety*, guidelines for non-medical personnel undertaking medical procedures. These guidelines were viewed by some as the medical profession reinforcing their power in what could and could not be delegated to others within the healthcare workforce. The guidelines did not reflect the degree of nursing autonomy defined by the UKCC and as a result the ethos of the scope was not embraced by the BMA, which led to criticism by the RCN regarding the acceptance of the direction of travel for nursing (BMA, 1996; Savage and Moore, 2004). This influenced general practice with GPs continuing to define the nurse's role, primarily led by their desire to meet the general medical services contract, also, because they were principally private providers, they could dictate the development of their nursing workforce (Atkin and Lunt, 1995). Mackereth (1995) believed that this resulted in nurses within general practice working with minimal autonomy and primarily within the scope of a medical model rather than a holistic nursing one that was envisaged within the principles of the Scope of Professional Practice.

Vulnerability of the General Practice Nurse Role

Many GPNs at the time worked without formal contracts of employment and had received little support for developing protocols to guide their practice (Stillwell, 1991; Patterson, 1993). Some felt that this restricted them from making the most of the principles of the Scope of Professional Practice and left them vulnerable in terms of legal protection. Health authorities and general practices grappled with their position as part of the healthcare workforce and vicarious liability was generally provided by health authorities rather than general practices themselves (Bowling and Stilwell, 1988;

Williams and Sibbald, 1999). As a result of this, historically GPNs appeared to be working very differently across the sector. There was no standardised role, experience or qualification that supported the GPNs' employment, never mind their professional advancement in clinical practice (Noakes and Johnson, 1999). Dent and Burtney (1997) recognised the difficulty this created, but inferred that some GPNs were beginning to challenge this view by paving the way for their roles to develop, whilst others were passively accepting the doctors' perception of the role of a nurse in general practice.

As the significant increase in workload and demand on primary healthcare services began to evolve following the adoption of the GP contract in 1990, practice nursing moved from a small minority across the country to the biggest increase in nurse recruitment that general practice had seen in years. Recruitment between 1995 and 2005 saw the number of full-time GPNs in England growing by 42% from 9,745 to 13,793 (McGregor et al., 2008).

Regulatory Recognition of the General Practice Nurse Role

It was recognised that the only way to support this part of the growing workforce and give them recognition and credibility for the work they were undertaking, was to lobby for a nationally agreed, recordable qualification. However, as Crossman (2006) pointed out this was a complex and lengthy process partly because of the lack of political pressure this group of nurses had on the overall nursing and healthcare workforce. There was already a recognised course for GPNs, in the form of the English National Board qualification A51, which provided them with a recordable qualification on the

UKCC register and gave nurses specialist practitioner status but did not provide academic credit (Richards, 1996).

The United Kingdom Central Council for nursing and midwifery (UKCC) spent much of the late 1980s and early 1990s attempting to agree standards for specialist and advanced practice. The standards were finally approved in 1994 at the Council's educational standards meeting. The UKCC had set formal, nationally agreed standards to recognise general practice nursing as a specialist recordable qualification on the register (Wallace and Gough, 1995). To achieve the specialist practitioner qualification, GPNs would need to undertake a UKCC approved programme. This would assess the nurse against learning outcomes such as being a leader; a role model; a facilitator of innovative and creative practice; a change agent by improving and creating standards of care through supervision of practice; and the provision of skilled professional leadership through clinical audit, research and teaching (Wallace and Gough, 1995).

However, the nursing and midwifery regulator failed to stipulate that all GPNs were required to hold the specialist general practitioner qualification; they recognised that specialist practice was generally part of their role, but that not all patients were required to be seen by a nurse holding this qualification. In fact, it was recognised that some GPNs would continue to practise with their ENB A51 award, as they carried the recorded title of GPN with the status but just without the academic award. Richards (1996) indicated there was a desire after many years of campaigning to move many within the field to the formal accreditation and specialist practice recognition, which was enabled by the accreditation of prior educational learning (APEL). Rae and Cook (2000) saw the opportunity of APEL as a very positive step forward and one that the discipline should

take seriously in being able to transition from a certificate qualification to recording their specialist status with the UKCC, via evidence within a portfolio of experience submission.

The implementation of the GP contracts, and in particular the GMS contract (DoH, 2004; DoH, 2003b), meant additional long-term health conditions were handed over to general practice. This was a turning point for GPNs as they began to become recognised as fundamental in co-ordinating and managing much of this activity in addition to their already diverse role within general practice (Fanning and Berry, 2016). Despite the ability to upskill much of the GPN workforce to graduate level with the creation and recognition of the formal registerable specialist qualification, it still appeared common that many within the sector struggled to access professional specialist development either by APEL or starting the graduate entry programme (Richards et al., 2000; Murchie et al., 2005). However, McDonald et al. (2008) viewed the new contract as a positive step forward for GPNs, in believing that GPs had little option but to develop their practice nursing workforce to meet the needs of the 'payment per performance' contract of 2004. Whilst some viewed this as a blurring of professional boundaries (Dahl, 2004; Henriksson et al., 2006; Lane, 2006), others viewed it as the start of the professional development of nurses within general practice, whereby nurses could begin to extend their roles (DoH, 2003b) into areas such as COPD. In addition, as McDonald et al. (2008) recognised, a large proportion of nurses engaged in this development to enhance their roles and status within the sector.

Professional Development

Whilst it was deemed critical to develop the workforce of nurses in general practice, Crossman (2006) found the GMS (DoH, 2003b) contract required practices to spend a significant portion of their time submitting data for the 'pay-per-performance' system of the Quality Outcomes Framework (QOF) in order to obtain the income attached for carrying out the new work. This created some conflict with the vision of the Department of Health (2003b) attempt to push forward the nursing contribution in general practice and many this as a barrier to nursing development. The Queens Nursing Institute (2016) in a contemporary report recognised that only 10.6% of a sample of GPNs held the specialist practitioner recordable qualification, with 47% of participants suggesting they did not receive support for their personal and professional development. The report further suggested that nearly half of GPNs did not feel they had the right number of appropriately trained nursing staff to carry out the demands for the service (QNI, 2016), despite providing the principal care for a wide range of people with complex chronic diseases. Upton et al. (2006) found that less than 20% of nurses undertaking spirometry to diagnose COPD had received formal training in this procedure and Fletcher and Dahl (2013) reported that the picture had not improved with nearly half of nurses who routinely prescribed or recommended medicines for the disease had little or no development.

However, despite the QNI (2016); Fletcher and Dahl (2013); and Upton et al. (2006) presenting a negative view of personal and professional development among the practice nursing workforce, Bodenheimer et al. (2002); Banham (2009); and Oliver (2017) recognised the skills and knowledge base of GPNs. Bodenheimer et al. (2002);

Banham (2009); and Oliver (2017) believed that GPNs were already working in advanced and diverse roles and as pointed out earlier, Fanning and Berry (2016) found GPNs entered the role from highly specialist areas of clinical practice. Therefore, an assumption could be that many nurses were already working at an advanced role, despite the lack of access to personal and professional development within general practice and it could be suggested they learned on the job.

Bunker et al. (2009) found that many GPNs were working at an advanced level with people living with COPD; this included diagnosing, treating and prescribing for people living with the condition. However, they highlight the inaccuracy with diagnosing, treating and prescribing and blame this is on the lack of formal education and training outside of the surgery environment. Many GPNs were working in extended roles of practice, which was largely driven and adopted under the direction of the original Scope of Professional Practice. However, some within the field felt the new and overly complicated ways of working, including moving between clinical and administrative data collection roles, did not give them time to develop because of the need to meet the bureaucratic requirements of the QOF (DoH, 2004b), which was essential for income generation for the practice. Fletcher and Dahl (2013) believed that the lack of appropriate clinical supervision, time for development and funding constraints associated with the pay-per-performance system negatively exacerbated the quality of care COPD patients received in general practice.

Whilst the QOF (2004) was aimed at improving quality and standardising key elements of care that people with long-term health needs received, some suggested it came at the cost of providing a person centred, holistic view of the patient. Some viewed the

adoption of the QOF as a biomedically driven model of data collection associated with primarily medical interventions (Chew-Graham et al., 2013). However, Griffiths et al. (2010) recognised the benefits of the QOF in improving patient care, but acknowledged there needed to be a greater number of nurses per practice to deliver the concept of overall quality, and achieve not only its targets but also true patient satisfaction. Griffiths et al. (2010) demonstrated that by employing a greater number of nurses per practice, there were improvements in chronic obstructive pulmonary disease, coronary heart disease, diabetes and hypertension management.

Care and Management of COPD in the Community

Therefore, 14 years on from the revised 2004 GMS contract (DoH, 2003b) where additional chronic conditions including that of COPD were handed over to general practice from secondary care, it is difficult to ascertain if there have been widespread improvements in the care and management of COPD (Griffiths et al., 2010). The QNI (2016) recognised that GPNs provide a fundamental role in caring for those living with COPD, including diagnosis, treatment and follow-up care. However, despite care being offered in general practice, COPD was reported to be the second highest cause of hospital admission in 2010/11 with the North West of England experiencing the second highest rate of emergency admissions in 2015/16 (BLF, 2016). The disease had the highest associated treatment costs of any chronic condition, often because of the prolonged period of hospitalisation (DoH, 2011). Whilst this may be due to a variety of differing factors, such as other co-morbidities, air quality or particularly cold, damp winters, there has been concern relating to the accuracy of diagnosis and treatment within primary care as discussed earlier.

The Royal College of Physicians (2016) reported there was continued difficulty with the diagnosis of COPD in primary care, with only 14.4% of all those diagnosed on the national register as being reported as accurate. If diagnosis continues to be inaccurate, one may question how subsequent treatment and effective management can follow. The RCP (2016) suggested this is reflected in the continued hospital admission and revolving door problem associated with the acute on chronic exacerbation of this condition. However, Halpin et al. (2007) and Miravittles et al. (2012) have suggested there is difficulty in diagnosing COPD in primary care settings, particularly as the GOLD standard is for the use of spirometry to assist in initial diagnosis. They recognise the inaccuracy of the method, particularly in interpretation and technique and believe that people can often be misdiagnosed with asthma instead of COPD or vice versa. This is certainly evident where nurses are seen to be using spirometry as a diagnostic measure to diagnose COPD (Upton et al., 2007; Griffiths et al., 2010; Fletcher and Dahl, 2013).

There have been a plethora of guidelines and standards published in an attempt to provide a framework for clinical practice to support the accurate diagnosis, treatment and ongoing management of COPD, particularly in reference to the primary care setting with a focus on keeping people at home (DoH, 2004; NICE, 2010; GOLD, 2017). However, despite the principle driver of primary care monitoring, the QOF (DoH, 2003b) and the widespread management of COPD in primary care, there remains concern relating to recurrent hospital admission and subsequent healthcare expenditure.

Whilst trying to understand whether the management of COPD within primary care has made a difference to people remaining well for longer, it is important to understand that

the number of people being diagnosed with the disease is increasing along with the admissions to hospitals and subsequent associated mortality rates common with a chronic degenerative condition. McLean (2016) stated that there were 99,200 deaths from COPD in 2011 and estimated this would increase to 129,400 by 2030, which is consistent with the continued rise in the diagnosis of the disease from 1.79% in England in 2011 to 2.19% by 2030. Is it therefore reasonable that some may consider this a failure in healthcare policy, particularly in early and accurate diagnosis and the prevention of people with the disease being admitted to hospital? However, Lunenfeld and Stratton (2013) believe that the rise in people living with chronic disease is a consequence of better detection and subsequent treatment; the technological advances seen in healthcare have contributed to the highest population growth in recent years. Lunenfeld and Stratton (2013) suggest this has come at a cost; the number of those now living into later life with chronic disease is becoming an 'epidemic'.

NHS England in conjunction with the Primary Care Respiratory Society (PCRS, 2017), released guidance relating to the care of people living with COPD. Recognising inaccurate diagnosis, treatment and recurrent admissions to hospital, they launched a pathway relating to better diagnosis and treatment with an aim of keeping people at home for longer and supporting GPNs with general standards to support their practice. However, with the growing demand on healthcare services and increased diagnosis and treatment available for a plethora of conditions, the system is struggling to cope with the care and management of many of these people.

Crisis in General Practice

Croxson et al. (2017) in a study of GPs' workload in England identified that many were struggling to cope with the general increased demand on their services, and in particular, the continued requests from secondary care for them to undertake investigations previously carried out by hospital doctors. As Goodwin et al. (2013) recognised, care for people with chronic conditions is not always co-ordinated as well as it could be within primary care. They put this down to the significant problems with communication between the two sectors, including highlighting the lack of engagement from general practice across a variety of case studies used for their report. Goodwin et al. (2013) recognised the increased numbers of people living with chronic conditions and the impact this has had on general practice. They believe the funding formula remains one of the biggest issues for what is essentially a private provider on behalf of the NHS. Whilst there is no doubt that nutrition is an important part of the care of people living with chronic diseases (Holmes, 2010; Shlisky et al., 2017; Keaver et al., 2018) it is unclear how this is incorporated and indeed viewed as part of healthcare treatment in general practice for those living with COPD. The nutritional impact on the care of people living with disease and the role GPNs play in this care will be presented below.

COPD and the North West of England

The number of individuals living with a diagnosis of COPD across England is an estimated 1.2 million, which equates to 2% of the overall population (Rayner et al., 2017). COPD is the UK's fifth biggest killer making it the second highest cause of death from respiratory disease. Nearly 30,000 people die from COPD each year, and the UK mortality rate is positioned third highest in Europe (Snell et al., 2016). The North West has the second

highest prevalence rate out of nine English regions, with only the North East topping the table (ONS, 2018). Consequently, Greater Manchester has 67,000 people living with the disease costing the health economy £73 million a year in associated pharmaceutical treatment and recurrent admissions to hospital (Health Innovation Manchester, 2018). With the North West of England and in particular Greater Manchester seeing some of the most polluted areas for air quality over the decades and a significantly higher proportion of individuals smoking, it is hardly surprising the region ranks high for associated respiratory treatment costs, admission to hospital and deaths from the condition.

COPD is characterised by two main types: chronic bronchitis, which is consistent with a long-term cough with mucus, and emphysema where the alveoli are weakened and tend to burst over time. People living with COPD will tend to have a combination of the two types, reflected in a cough which is initially transient and unproductive in nature, but can become persistent over a longer period and can progress to becoming productive and frequently infective (Pauwels and Rabe, 2004; Nielsen et al., 2015). People will experience dyspnoea, which progressively worsens and often results in them visiting a GP, who initially uses spirometric measurements to diagnose the condition. Dyspnoea worsens causing an adverse effect on people's activities of daily living and as the disease progresses, people can often experience what they describe as a heavy weight when trying to breathe, lack of air or a puffing feeling (Simon et al., 1990).

As COPD progresses and advances towards the later stages of the disease trajectory, weight loss and cachexia can occur as a result of higher than normal metabolic demand. This is because the body is attempting to increase its respiratory drive to oxygenate its

major organs and maintain homeostasis (Vassilakopoulos et al., 2004; Wust and Degens, 2007; Von Haehling and Anker, 2014; Kwan et al., 2018). Von Haehling and Anker (2014) found that across Europe and based on a combined population of 742 million people, an estimated 3.5% of the population were living with COPD, of which 1.4 million people were described as experiencing cachexia. Cachexia related to COPD has been seen to increase mortality risk by 15% to 25% at one year. Cachexia can occur in people with COPD who are frequently breathless. People can struggle to eat as this activity can feel like it is exacerbating the feeling of not being able to breathe because the airway is closed and protected during the normal physiological processes of swallowing. This is designed to protect from aspiration but unfortunately causes distress for some living with COPD (Lancaster, 2015; Nagami et al., 2017).

Therefore, with nutritional status being recognised as a common complication of the disease effect, I assumed this would play a fundamental role when being cared for within general practice; this was certainly a preconception I had before I started the research. As a nutrition nurse working predominately in hospital, I held the view that policies and practices relating to nutritional screening and assessment were embedded across all areas of healthcare provision. However, this was not the case. Whilst Zwar et al. (2016) recognised the important role GPNs play in the care of people living with COPD, it was evident nutrition did not feature. They found in a study of 55 GPs and 55 GPNs, that nurses would assess, treat and prescribe, including developing robust management plans for this group of patients, often independent of the doctor. However, much of the research within this field predominately focusses on the biomedical elements of care, such as undertaking spirometry, FEV1, blood biochemistry and recording muscle strength, but fails to acknowledge nutritional intervention in the study.

Although this research is dated, Martyn et al. (1998) demonstrated the importance of nutrition in chronic disease management suggesting that 8% of chronic disease patients were malnourished and living in the community within the UK. They found that hospital admission for those patients with a BMI of lower than 20 was significantly higher and suggested recovery/remission from chronic disease was delayed among this group because of their poor nutritional status. The Care Quality Commission, the independent regulator responsible for health and social care provision in England, certainly inspect nutritional care provision within secondary care, but the extent of their inspection within general practice does not extend to this essential area of clinical practice. Within their key lines of enquiry, nutrition and hydration are firmly assessed in hospital but do not appear to in their guidance for general practice. Therefore, the assumption that nutrition would play a fundamental part in a patient's care with COPD in general practice is perhaps one that is misinformed by my clinical background and exacerbated by a lack of scrutiny in general practice service provision.

Nurse Role in Caring for COPD and Nutrition

There is a lack of literature regarding the nurse's role in nutritional care of people living with COPD, where it does exist this is sparse and dated. Odencrants et al. (2007), in a study of Swedish primary care nurses, recognised the fundamental relationship that nutrition has with the disease. However, they found that nurses often delay information relating to dietary advice, because they found the topic too sensitive and in many cases lacked the depth of knowledge to feel confident in the information they were providing. A study in UK highlighted the care of older people living with COPD in the community;

the information given to patients relating to COPD and nutrition was inaccurate and in some cases this aspect of care was not discussed (Jones et al., 2004).

The literature highlights there have been significant problems associated with malnutrition of people across a variety of settings in hospital, and consequently there has been a strategic attempt to address some of the care deficiencies within this setting. It is recognised that a significant proportion of people have been admitted to hospitals displaying signs of malnutrition and for those living in the community, the condition is largely unrecognised and therefore undetected. People living with COPD are particularly susceptible to malnutrition, which is an acute on chronic condition and adversely affected by the progressive nature of the underlying disease effect. People living with the condition can often be admitted to hospital with an exacerbation, which may require medical intervention but because of the need to treat and discharge, nutritional status may not be seen as a priority in their treatment. Long-term, chronic health conditions are generally diagnosed and principally managed within general practice. This has not only been a supporting role but also a leading one for the GPNs since the changes to the 2004 GMS contract (DoH, 2003a; 2003b). What is not so clear is the role of the GPN in the nutritional care of people living with COPD, and their knowledge, attitudes and experiences of providing nutritional care for this group. Whilst it is accepted, that nutritional care for people living with COPD could, and in many cases, is provided by a range of healthcare professionals, families and people themselves, this research is firmly positioned through the lens of the GPN within Greater Manchester.

Concluding Remarks

The key points that emerged from this chapter are

- Since the inception of the NHS (70 years ago), the health service has been subject to a cycle of political and organisational change.
- The care and management of chronic long-term health conditions have been subject to this reorganisation and moved from secondary to primary care, with general practice principally managing patients with such conditions.
- For general practitioners to take on and deliver such care, several negotiated contracts were achieved, which resulted in an increase in the number of nurses working within general practice to fulfil this agreement.
- General practice nurses have experienced resistance in developing their role in general practice from not only their medical colleagues but also their peers.
- The utilisation of the Scope of Professional Practice, alongside recognition by the NMC (formally UKCC) has enabled general practice nurses to gain credit and identity for their role.
- For decades, the focus of nutritional care has been on the hospital sector, but with recognition that 93% of malnutrition occurs in the community the focus is now beginning to change.
- People living with COPD are at risk of undernutrition, this is because of the psychosocial and physiological implications of the disease.

The aim of this chapter was to provide an exploration of chronic health conditions with a special focus on COPD and nutrition including recognition of the global, national and

local picture associated with the disease. The political contexts of general practice, standards, quality of services and reform within the sector have been discussed. Malnutrition is prevalent in both the hospital and community sectors, with identification more difficult for those living in the community. The evolution of general practice nursing, including the Scope of Professional Practice and the role GPNs play in the care of chronic conditions in general practice have been discussed. So, having reviewed the literature relating to various aspects of the proposed area of inquiry, it was evident there is a lack of literature relating to the GPN's role in the care of people living with COPD and how they address the nutritional needs of this group in the general practice setting. In providing context to my chosen area of COPD and nutrition in general practice, the next chapter will articulate my methodological decisions and provide a rationale for my chosen approach.

Chapter 3 – Methodology

Introduction

The overall aim of this chapter is to explore and present the ontological and epistemological position, research design and methods chosen in order to explore my research question: ***“what is the role of the General Practice Nurse in meeting the nutritional needs of people living with COPD?”*** I will now present the quantitative and qualitative stages of the research process including reference to sample sizes, response rates and the analysis of the data.

The Research Study

Research aim

The aim of this study was to explore,

- The role of the general practice nurse in the nutritional care of people living with COPD.

Research objectives

In order to address the research aim of the study, the following over-arching objectives of the study were to:

- Evaluate the historical and contemporary literature relating to the nutritional care of people using primary and secondary health services.
- Analyse the current nutritional practice of a sample of general practice nurses caring for people living with COPD through a survey.

- Analyse the thoughts and feelings of a sample of general practice nurses about their role in providing nutritional care for people living with COPD through qualitative interviews.
- Contribute to the body of knowledge about the role of the general practice nurse in the nutritional care of people living with COPD.
- Offer suggestions about the ways in which the findings could inform the nutritional care of people living with COPD in primary care.

Study setting

The study was carried out across Greater Manchester, which consists of 10 local authorities, including Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan. They make up an estimated population of 2.7 million residents (ONS, 2016), served by 500 general practices who all employ a GPN/s.

Philosophical Approach

The majority of nursing practitioners would not consider their philosophical approach to research; nursing in many ways has been aligned to medicine, which is generally associated with viewing the world with a positivist approach. I therefore reviewed the work of Teddlie and Tashakkori (2009); Mertens (2015); Guba and Lincoln (2005); and Creswell and Plano Clark (2011) in helping me think about my ontological and epistemological position. Various philosophical underpinnings are possible when undertaking research; Guba and Lincoln (1994:107) describe these as paradigms and suggest,

A paradigm may be viewed as a set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the “world”, the individual's place in it, and the range of possible relationships to that world and its parts. (1994:107)

Table 3: Basic beliefs associated with major paradigms

Basic Beliefs	Postpositivism	Constructivism	Transformative	Pragmatic
Axiology (nature of ethical behaviour)	Respect privacy; informed consent; minimise harm (beneficence, justice/equal opportunity)	Balanced representation of views, raise participants awareness; community rapport	Respect for cultural norms; beneficence is defined in terms of promotion of human rights and increase in social justice; reciprocity	Gain knowledge in pursuit of desired end as influenced by the researcher's values and politics
Ontology (nature of reality)	One reality; knowable within a specified level of probability	Multiple, socially constructed realities	Rejects cultural relativism; recognises that various versions of reality are based on social positioning; conscious recognition of consequences of privileging versions of reality	Asserts that there is a single reality and that all individuals have their own unique interpretation of reality
Epistemology (nature of knowledge; relation between knower and would be known)	Objectivity is important; the researcher manipulates and observes in a dispassionate objective manner	Interactive link between the researcher and participants; values are made explicit; created findings	Interactive link between the researcher and participants; knowledge is socially and historically situated; need to address issues of power and trust	Relationships in research are determined by what the researcher deems as appropriate to that particular study
Methodology (approach to systematic inquiry)	Quantitative (primarily) interventionist; decontextualized	Qualitative (primarily); hermeneutical; dialectical; contextual factors are described	Qualitative (dialogic) but quantitative and mixed methods can be used; contextual and historical factors	Match methods to specific questions and purposes of research; mixed methods can be used as

			are described, especially as they relate to oppression	researcher works back and forth between the various approaches
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(Reproduced from Mertens, 2015:11)

Mertens (2015) builds on the work of Guba and Lincoln (1994, 2005) and Morgan (2007) and presents the concept of four key research paradigms (Table 3), presenting post positivist, constructivist, transformative and pragmatic approaches, which range from objectivity to subjectivity in terms of their view of the world. For example, Mertens (2015) believes the pragmatic paradigm is in keeping with the ontological view that there is a single reality and that individuals have their own explanation of it; and the nature of knowledge is generated by what a researchers deems as suitable for the study.

In addition, Teddlie and Tashakkori (2009:84) define a paradigm as, 'A worldview, together with the various philosophical assumptions associated with that point of view' (Table 4).

Table 4: Inquiry paradigms in social sciences

Paradigm	Positivism	Postpositivism	Pragmatism	Constructivism
Methods	Quantitative	Primarily quantitative	Quantitative + qualitative	Qualitative
Logic	Deductive	Primary deductive	Deductive + inductive	Inductive
Epistemology	Objective point of view knower and known are dualism	Modified dualism Findings probably objectively true	Both objective and subjective points of view	Subjective point of view Knower and known are inseparable
Axiology	Inquiry is value-free	Inquiry involves values but may be controlled	Values play a large role in interpreting results	Inquiry is value-bound
Ontology Choose explanations that best produce desired outcomes	Naïve realism Relativism	Critical or transcendental realism There are some lawful, reasonably stable relationships among social phenomena which may be known imperfectly	Accept external reality	All entities simultaneously shaping each other
Causality	Real causes temporally precedent to or simultaneous with effects	Causes are identifiable in a probabilistic sense	There may be causal relationships but we will never be able to pin them down	It is impossible to distinguish causes from effects

Source: Tashakkori and Teddlie, 1998:23

Similar to Mertens (2015), Tashakkori and Teddlie (1998) (Table 4) describe four research paradigms but put forward the paradigm of positivism as a way of viewing the world. Many theorists have rejected this paradigm believing that simply accepting only

what we can observe and measure is naïve and a post positivist view of the world is more likely to support the full range of human experience.

When carrying out research we consider various perspectives: what comprises nature and being, which is referred to as ontology; what knowledge is, epistemology; and how knowledge is generated through the utilisation of methodology (Crotty, 1998). An underpinning philosophical approach is utilised to support the study aims and objectives and provide a conceptual framework to enhance the methods used to answer a given research question (Simm and Wright, 2000; Morgan, 2014). I have positioned myself as a pragmatic researcher; I see reality in believing that we should focus on what works rather than trying to align our view of the world to one ontological view. A pragmatic approach allowed me to bring together the post positivist elements of research philosophy and design, along with a constructivist element to help support breadth and depth in the study. I am drawn to this position based on my specialist nursing background, particularly those years spent in nutrition, which have resulted in me trying to find solutions to problems when evidence or guidelines have been sparse.

Nursing, although a profession which professes to practise according to the evidence base (Carr, 2009; Risjord, 2010), acknowledges a large part of our practice is based upon guidelines developed through expert opinion because of the absence of robust empirical evidence (French, 2002; Thorne and Sawatzky, 2014). Many have adopted a pragmatic approach in the definition of evidence-based practice suggesting that the approach is defined by the development of knowledge through research, clinical experience, patient experience and information from the local context (Rycroft-Malone et al., 2004). It is

therefore reasonable to suggest that the way I look at the world in order to answer questions is within the essence of what Nowell describes as,

...bringing together multiple sources of knowledge with the goal of finding workable solutions, gaining a greater understanding of people and the world in which we live and practice and solving individual and social problems. (2015:143)

Nursing practice with all of its unpredictability and multiple approaches to achieving the same goal for our patients is based on finding solutions from a variety of sources. This has led to my development as a pragmatic practitioner and subsequently to my belief that I should take this approach as a researcher in finding multiple solutions in an attempt to find answers to the problems that exist within my research question. The philosophical paradigm of pragmatism is defined as the ability to accept multiple views, perspectives and theories to support the notion of how the world is viewed (Rorty, 1999). There is flexibility in approaches and no hard or fast rule in dictating how knowledge is ultimately created; Cherryholmes defines it thus:

For pragmatists, values and visions of human action and interaction precede a search for descriptions, theories, explanations, and narratives. Pragmatic research is driven by anticipated consequences. Pragmatic choices about what to research and how to go about it are conditioned by where we want to go in the broadest sense. (1992:13)

Therefore, being a pragmatic researcher has a number of advantages; it does not constrain a researcher in exploiting one methodological approach over another. It permits a researcher the flexibility to utilise both inductive and deductive reasoning and therefore move back and forth between the two approaches of quantitative and qualitative methods in making sense of the world around us (Morgan, 2007). This was particularly pertinent to my research, in positioning myself within the pragmatic paradigm.

I read other studies to understand the application of a pragmatic approach in answering a research question. For example, Laws et al. (2008); Rycroft-Malone et al. (2012); and Trahan and Stewart (2013) had all used multiple research methods to enable them to achieve breadth and depth in their studies. These research designs, which utilised the pragmatic paradigms, appeared to be an effective approach for my research. I was aware that using a questionnaire to survey GPNs for the quantitative phase of my research would only support some of the elements of my research aims. It was therefore important to compliment this approach with the qualitative stage by utilising the concept of participant interviews. The interviews could be structured, semi-structured or unstructured to attempt to build upon phase one of the research and ultimately support addressing all of the aims of the research question. Laws et al. (2008) acknowledge the benefits of undertaking such approaches in research design when carrying out a study into clinician beliefs and attitudes of lifestyle risk factors in primary care. They took a pragmatic epistemological approach in employing a self-administered questionnaire followed by interviews. Laws et al. (2008) believe that this approach offered the opportunity to provide the breadth and depth to the research in order to provide what they describe as a more 'complete picture' in their results.

Mixed Methods

Based on my reading of other studies, I wanted to explore approaches that would fit with my pragmatist leanings. Mixed methods research offers the opportunity to combine multiple methods of inquiry by utilising approaches such as of those used by Laws et al. (2008) to research design and combining those methods of inquiry to answer a single research question (Creswell and Plano Clark, 2007; Tashakkori and Teddlie,

1998, 2010). The mixed methods approach is based upon an assumption that both qualitative and quantitative data will be collected (Figure 1), mixing the two to deliver a richer more rounded methodological approach, which is particularly useful in social science research (Johnson and Onwuegbuzie, 2004). Creswell and Plano Clark (2017) recognise that both qualitative and quantitative approaches in isolation have their limitations and combining the approaches can offset these and ultimately maximise credibility in the breadth and scope of the research.

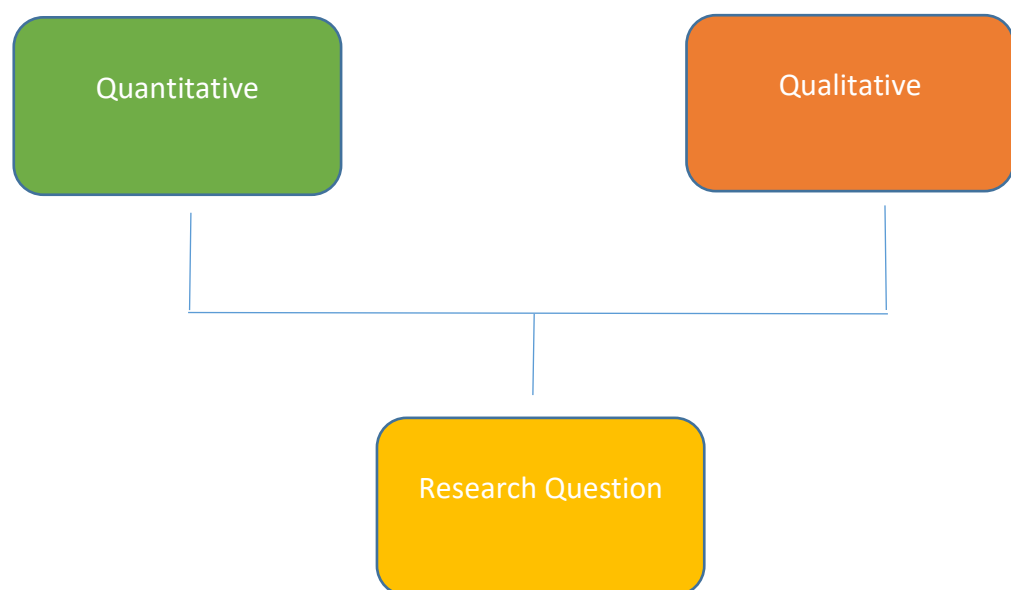


Figure 1: Mixed methods design

Mixed methods design enables the researcher to align themselves to an approach, which takes into account whether the quantitative or qualitative stage takes place first, and at what point the integration of the data takes place. The designs outlined below by Creswell et al. (2003) indicate which methods are given priority within the chosen design.

Table 5: Features of mixed methods design

Mixed Methods Design	Theoretical Lens	Timing	Integration	Methodological rationale	Priority
Sequential explanatory design	Implicit (postpositivist)	Sequential – beginning with quantitative phase	Data analysis stage (connected) and interpretation stage (merged)	Complementarity	Quantitative data
Sequential exploratory design	Explicit (Constructivist)	Sequential – beginning with qualitative phase	Data analysis stage (connected) and interpretation stage	Development, complementarity and/or expansion	Qualitative data
Sequential transformative design	Explicit – advocacy	Sequential – beginning with either quantitative or qualitative phase	Data analysis stage (connected) and interpretation stage (merged)	Complementarity and/or expansion	Either Quantitative or qualitative data (sometimes both)
Concurrent triangulation design	Implicit	Concurrent	Data analysis (separated) and interpretation stages (merged)	Triangulation	Equal – both quantitative and qualitative data
Concurrent nested design	Implicit or explicit	Concurrent	Data analysis (data transformed and/or merged) and Interpretation stages (merged)	Complementarity, initiation and or expansion	Unequal
Concurrent transformative design	Explicit advocacy	Concurrent	Data analysis (separated) and interpretation stages (merged)	Complementarity, initiation and/or expansion	Equal or unequal

Source: Creswell et al., 2003

Creswell (2017) describes mixed methods research as utilising both quantitative data, that of numbers and statistics, and qualitative data, that of stories of people's lived experiences and combining these methods to present a fuller picture and more rounded and detailed explanation of a particular topic. For example, Laws et al. (2008) in their study of clinicians' beliefs and attitudes of lifestyle risk factors in primary care undertook a survey of clinicians' practices relating to risk factors associated with deterioration of lifestyle and used this data to inform semi-structured qualitative interviews in the second stage of their methodology. This provided an effective sequential explanatory approach of how to combine methods; first the quantitative stage, with analysis of the

findings then informing the qualitative interviews. This enabled the researchers to not only present statistical data but also to unpack the meaning behind the statistics in exploring their interviewees' responses to their completed questionnaire.

Creswell (2017) believes that the characteristics of mixed methods research ensure that the quantitative and qualitative methods are appropriate. Quantitative methods are predetermined by a researcher and generally centred on an instrument-based approach. For example, Laws et al. (2008) undertook a survey for the quantitative stage of their research and used a statistical software package to analyse the data. In contrast, a qualitative design is an emerging method that develops throughout the methodology employed; for example, open-ended approaches to interviews, observations and/or text, which can be analysed by examining themes and patterns in the data through interpretation. Laws et al. (2008) undertook semi-structured interviews, utilised a thematic analysis to analyse the data for the qualitative part of their research, and combined both methods in order to provide a more rounded view of clinician beliefs and attitudes in the management of lifestyle risk factors in primary healthcare.

Tashakkori and Teddlie (2010) and Creswell (2017) believe that both methods have their benefits, and that is why mixing both approaches offers the opportunity to provide not only statistical data across large numbers of data sets but also the ability to drill down to offer context and depth to explain what the data may actually mean. However, designing mixed methods research can be time consuming and complex depending on the multiple methods utilised. I designed a mixed methods study based on the process reported by Laws et al. (2008). The development of my questionnaire, was underpinned by the work of Rasmussen et al. (1999); Upton et al. (2007); and Awad et al. (2010)

and used expert focus groups to develop the questions to help achieve exploration of the GPNs role in COPD care and nutritional practice in preparation for its use with the study sample, This will be discussed in greater depth later in the chapter. The time sending out questionnaires, followed up with reminders, took over four months prior to any analysis of data. Phase two of the process was equally as time consuming. Attempting to engage and arrange field interviews from the sample that had volunteered their time took six months to complete, this was because of workload and the frequent failure to respond in booking an interview time/date. Iaquinto (2015), in his study of the experience of backpackers, examined the benefits and weaknesses of utilising multiple methods in mixed methods research. Whilst Iaquinto (2015) acknowledges the utilisation of multiple methods of inquiry, he recognises the challenges of various methods as outlined in Table 6.

Table 6: Strengths and weaknesses of each method in detecting sustainable practices

Methods	Strengths	Weaknesses
Interviews	Their informality encourages people to speak candidly about their practices,	Practices people forget or wish not to discuss remain hidden
Participant observation	Places practice in context, amongst the objects, people, social milieu and other practices they interact with	Detecting transitory practices requires a consistently high level of awareness, and some practices are unobservable
Questionnaires	Can assess how often practices are performed	Context in which practices are performed is unknown
Content analysis	Practices are captured in print so they can be analysed comprehensively	Identifying discreet practices

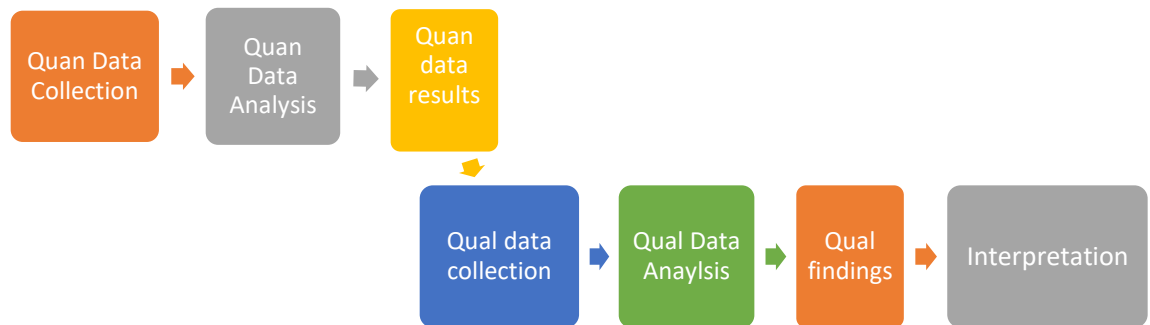
Mixed methods	Provides multiple ways to detect practices	Determining the most effective way to mix
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Source: Iaquinto, 2015:485

However, despite these pitfalls, Creswell (2017) suggests that both approaches used individually have their limitations. Quantitative methods are often seen as impersonal and dry and primarily driven by the researcher's agenda, whereas qualitative methods are often limited to smaller numbers of soft data, which can be seen by some as having limited generalisability to a population. Pfaff et al. (2014) in their study of the confidence of new graduate nurses in inter-professional collaboration used a mixed method approach by using an explanatory sequential design to their research. They carried out a survey for the quantitative stage targeting 1,600 graduates, achieving a data return of 669 questionnaires, which equates to a 42% response rate.

The quantitative stage of any study is often designed to handle large numbers of data and in doing so statistical software is often used to undertake analysis, with Pfaff et al. (2014) using SPSS 19. Using a statistical software package enables a researcher to compare and contrast the data, in order to measure statistical significance and relationships between multiple variables. In the qualitative stage, Pfaff et al. (2014) undertook telephone interviews with 16 participants, recruited from the quantitative stage of the research. Whilst only 16 participants were recruited to this stage of the study, significantly less than the return from the quantitative stage, it was recognised that the data generated from the interviews resulted in over 16 hours of data. The researchers concluded they had hit data saturation at that point as similar themes were

being repeated. Pfaff et al. (2014) utilised the principles of a sequential explanatory design as outlined by Creswell (2015) as seen below:



Source: Creswell, 2015:60

Figure 2: Sequential explanatory design

Tashakkori and Teddlie (2010) point out that the sequential explanatory design to mixed methods research is typically one of the most popular and straightforward approaches to designing a study. They suggest that the collection and analysis of the quantitative data precedes the collection and the analysis of the qualitative stage. As seen in Laws et al. (2008) and Pfaff et al. (2014) the quantitative stage was undertaken first in both studies with the qualitative method then proceeding and being given priority. Tashakkori and Teddlie (2010) and Creswell (2017) suggest this is a true explanatory sequential design because the quantitative results influence and provide a foundation for the qualitative stage. However, in attempting to employ this approach for my study, the quantitative stage (phase one) did not go according to my expectations, in that the data yielded no clear view of practice and therefore the priority of data integration was not given to the quantitative stage of the research.

Design and Methods

Study sample

It is important to have an understanding of the concept of a study sample in mixed methods research. Time orientation and sample relationship are important factors to consider, and support the construction of the study to maximise participation throughout both phases (Creswell, 2014). I initially chose a sequential explanatory approach, where the data is collected in separate stages. Using this approach, the quantitative phase comes first and data analysis informs the subsequent qualitative stage. However, there were no clear patterns emerging from this stage therefore I felt that a concurrent approach would be more suited to meeting the aims of the research. Working in this way enabled the first stage to feed into the next on an ongoing basis, enabling me to exploit the interviews to the best advantage. This supported my decision and view regarding the qualitative phase of the research. The relationship between the quantitative and qualitative participants is considered important and could include samples that are identical, parallel, nested or multilevel. For the purpose of my research, a nested sample relationship was utilised, in that the same participants are utilised from the quantitative sample to feed the qualitative interview part of the study. Onwuegbuzie and Leech (2007) support this approach, suggesting nested sampling can take a number of forms, but is principally where participants in the new sample are selected from the previous sample of participants.

Mactavish and Schleien (2004) utilised a nested approach to their sampling when undertaking a mixed methods study into the experiences of families with children who were living with learning disabilities; 65 families completed and returned a

questionnaire with 16 of these families indicating they wished to participate in the qualitative interview phase of the research. In selecting the families for the interview phase of the research, Mactavish and Schleien (2004) undertook a purposive sampling technique by using a set criterion developed following the quantitative stage of their study. Nested sampling permits a range of both random and purposive techniques, which I had intended to employ during my research by aligning my sampling technique to what Onwuegbuzie and Collins (2007) refer to as multi-stage purposeful sampling.

In an explanatory sequential approach, sampling can be defined as random in the quantitative phase, with purposeful sampling in the qualitative phase of the study, which is primarily associated with those participants who have identified their willingness to share their stories in interviews (Creswell, 2014). However, the quantitative phase of my research did not yield a clear view of practice, nor did I get sufficient numbers of willing participants from phase one of the study to volunteer to be interviewed, which made it difficult to develop a criterion to select participants in phase two of my study. It was at this stage, that I reverted to an opportunistic or a convenient sampling method (Elfil and Negida, 2017), whereby I used the participants who offered to be interviewed and were available within the timescale of my study.

Ethics approval

When designing the study, I completed the Health Research Authority (HRA) checklist to clarify if the study required HRA approval. Whilst the study was interviewing staff working on behalf of the NHS (GPNs), it was not targeting patient or subject identifiable data, nor was it requiring patients to participate within the study. Therefore, according

to the checklist, it was deemed not to require NHS approval. I proceeded to complete the Manchester Metropolitan University ethics checklist and provided information relating to the study; the participant information leaflet (Appendix, 2); and the questionnaire (Appendix, 3) and information relating to the interviews (Appendix, 4), including a consent form (Appendix, 5) and information regarding participants' prerogative to withdraw from the study at any time. Ethics approval was granted on 7th August 2014 (approval number 1229) for both phases.

In designing a study that was aimed at researching peers of the same discipline, I was acutely aware of the ethical issues that may arise from this type of study into the nurse's role, perceptions and beliefs regarding an area of their clinical practice. As Coar and Sim (2006) identify, peer-to-peer research, particularly utilising a method of interviewing, can bring risks that may impact on the quality of the data yielded from the participants. Gubrium and Holstein (2002) suggest that a professional with knowledge of the field they are researching, particularly when undertaking field interviews, can harness a culture of professional identity, connecting to and having a real understanding of their participants. Another benefit they suggest is the utilisation of terminology and a joint understanding of the professional culture for which the researcher and interviewee both work can strengthen the process and positively influence the data that is collected.

It is suggested that academic research without the professional perspective influencing the process can indicate to a participant that they need to explain the area being researched in much more detail; this may encourage more depth to the discussion as the respondents attempt to fully convey the area being researched (Coar and Sim, 2006). However, as Iversen et al. (2002) found in their study of workload pressures in general

practice, despite a researcher having insight into the field, if participants viewed them as an 'outsider' it could generate an element of suspicion and caution in the overall disclosure and richness of data secured throughout the interview. My role within the study was identified as a nurse lecturer with an interest in COPD and nutrition. Many of the participants asked about my clinical background at the start of the interview, which I declared was as a nutrition nurse specialist.

Raheim et al. (2016) recognise that undertaking qualitative interviews, where the researcher is identified as an 'expert' in the field of inquiry, could significantly affect the quality of the data secured throughout the process, as the balance of power shifts in the relationship from the participants to the researcher. However, despite declaring my role as a nutrition nurse specialist, I made it abundantly clear to the participants that I was interested in the care of people living with COPD and lacked experience in this field as well as in their role within general practice. I conveyed this in an attempt to rebalance the concerns cited in some of the literature and further strengthen the connection I had with the participants. Flyvbjerg (2001) supports this notion of a shared experience, with the researcher being as dependent on the participant for the data as the participant is on the researcher to enable them to feel comfortable in sharing their story (Karnieli-Miller et al., 2009).

One area of concern when undertaking research of highly regulated clinical practice, is balancing the confidentiality of the data disclosed by the participant with the professional requirements of being a registrant researcher. If poor practice was identified during either stage of the research, it was important to recognise that the ethical/legal driver of reporting this practice would always outweigh the benefits of

fulfilling the research project. As both Coar and Sim (2006) and Enosh and Ben-Ari (2010) identified in their studies, some of their participants assumed the research was a test of their knowledge and felt threatened by the prospect of being questioned regarding their practice, which may not be seen as congruent with the overall aims of the research and quality of contemporary practice. Hewitt (2007); Jack (2008); Petrova et al. (2014); Raheim et al. (2016); and Tee and Lathlean (2004) all recognise the difficulty researchers encounter when they are also healthcare professionals with accountability and responsibility for adhering to codes of practice with regulators. The participant information sheet I constructed for my research (Appendix, 2) had a limited confidentiality clause within it, and acknowledged that if it was deemed that patient safety was at risk through data that was disclosed, confidentiality could be breached and compliance with the Nursing and Midwifery Council Code (NMC, 2015) maintained.

Data was managed and stored according to university ethics guidelines and in compliance with the Data Protection Act. All data collected through both phases of the research was stored on a password-protected computer, which uses a secure firewall. Paper transcripts and hard copy questionnaires were locked in a cabinet, which were accessible via a room with swipe card access. As the General Data Protection Regulation (GDPR, 2018) was enacted towards the end of the research, the principles for the management and storage of the research data were applied in that “the University is registered with the Information Commissioner’s Office (ICO), and manages personal data in accordance with the General Data Protection Regulation (GDPR) and the University’s Data Protection Policy.”

The Quantitative Method

Study sample

The quantitative study sample targeted all GPNs that were in a lead role within their surgery and were primarily responsible for the care of COPD patients. I attended the Greater Manchester General Practice Nurse Forum (GMGPNF) meeting at NHS England – North, and was provided with information that Greater Manchester at the time had 500 general practices across 10 boroughs within it. The GMGPNF supported the research and agreed to share general practice details including lead nurses within these practices. This enabled me to target all practices with one questionnaire per practice, with a total of 500 questionnaires sent out across Greater Manchester.

Whilst it was recognised, my area of inquiry was a largely under-researched part of clinical practice, there were some studies; these had elements in common with my aims although primarily undertaken in the hospital setting. Some of the methods relating to survey design and construction were utilised within the development of my questionnaire. Rasmussen et al. (1999) and Mowe et al. (2008) surveyed healthcare workers' knowledge and attitudes relating to various aspects of nutritional care in hospital settings; questions from the questionnaires within these studies supported the initial construction and the development of the questionnaire for the nutritional concepts of my survey. One study relating to COPD and primary care, that of Upton et al. (2007), reviewed the roles and training of primary care respiratory nurses in the UK. They developed a model that practitioners could categorise themselves against relating to their role in caring for patients living with COPD and supported each with a

description of care against each level. The levels of basic, intermediate or advanced roles in care were used as a model for the GPNs to align their practice in my questionnaire.

Questionnaire

For the purpose of the quantitative phase of the study, I wanted to survey GPNs and so developed a questionnaire that would capture key elements of practice and support my aims in answering the research question. Whilst my clinical background as a nutrition nurse went some way in helping me think about the types of questions I thought I wanted answered, my lack of knowledge in community general practice and how COPD was managed in primary care presented many challenges in the development of the questionnaire. The questionnaire was initially constructed to capture information relating to key information about the general practice including how many medical and nursing staff were employed and questions relating to COPD, nutrition and education, as well as the perceived level of autonomy when undertaking care for patients living with the disease.

As discussed earlier, I utilised some of the characteristics of Upton et al.'s (2007) study on respiratory care along with questions generated from the review of the literature above. One key question taken from Upton et al.'s (2007) study on respiratory care in general practice was the perceived level of skill and knowledge in working with people living with COPD. Upton et al. (2007) created a category system based on the assumptions of basic, intermediate and advanced levels of working, and aligned these categories with a description of what nurses may undertake whilst working with people living with COPD in each of these categories. It is recommended that when developing

a questionnaire, as part of a method of research, testing of the questionnaire should be attempted either by formally validating the instrument or by undertaking a pilot study. This is designed to reduce the risk of receiving inadequate or incomplete responses by strengthening the connection participants may have with the study and ultimately supporting the notion of an increased overall response rate (Oppenheim, 2000).

Ongoing questionnaire development

Much of the literature relating to undertaking a survey and questionnaire design discusses the notion of testing the questionnaire prior to its formal use for data collection. This can commonly be achieved by undertaking a pilot study as seen in studies by Brown et al. (2007) and Griffiths et al.'s (2010) survey of general practice nursing. It is particularly useful in determining if the questions formulated in a survey mean the same thing to different people within the sample (Robson and McCartan, 2016). Van Teijlingen and Hundley (2001) acknowledge the importance of testing an instrument, such as a questionnaire, by utilising a pilot or pre-testing phase for a study. They recognise that this can significantly reduce the risk of poor or inaccurate data being returned within the main study sample and believe it might give cautionary notice if the research project could potentially fail before fully embarking on the main research phase. It can also help to identify if the participants do not follow the natural progression and advice given with the questionnaire and suggest if the questions are inappropriate or overly convoluted and problematic.

Avoiding confusion or misinterpretation is critical not only to the data returned but the completion rate of the questionnaires. If participants are unclear about the questionnaire because of a lack of clarity, focus or connection to them as clinicians, data

returned could be questionable (Van Teijlingen and Hundley, 2001). The development of the questionnaire in the study required some form of testing prior to being distributed to the 500 general practices across Greater Manchester. However, as Peat et al. (2002) point out, pilot studies have their flaws, in that they can potentially contaminate the main study sample, and confusion lies in whether data from the pilot should be included in the final study. Leon et al. (2011) suggest that when testing parts of any study instrument, such as a questionnaire, caution regarding whether to include the test data in the main study findings must be built into the process. This is because there is a risk that the reliability of the data between the testing stage and final collection could vary because of the changes to the process that may have been made between phases. This presented me with an obvious concern of contaminating the sample and affecting the final response rate of the GPNs across the sample, particularly if some had already returned one questionnaire in the pilot stage. I was unsure whether there would be confusion about this and how this may affect the response rate in the main part of study.

I further developed the questionnaire with the support of two expert groups, rather than undertaking a pilot study. The draft questionnaire [based on the work of Rasmussen et al. (1999); Upton et al. (2007); and Awad et al. (2010)] was presented to the groups and a request made to suggest amendments in line with their current practice. The first was a panel of lead GPNs from the 10 boroughs of Greater Manchester. The lead nurses were not necessarily COPD leads, but strategic nurses who sat on clinical commissioning groups (CCGs) boards. This was the Practice Nurse Forum hosted by NHS England – North. I was invited to present the key concepts of the study, including the overall aims and objectives. During this meeting, I was offered the time to logically go through a first draft of the questionnaire to clarify whether the questions

asked were clear; a number of changes were made during this process. The second focus group was an expert respiratory team, which included a consultant in respiratory medicine, respiratory nurse specialist and respiratory dietitian from a secondary care respiratory centre; they provided different perspectives and supported modifications to the questionnaire. These changes related to the inclusion of some respiratory assessments that would be expected to be seen in a community review. The addition of a range of blood biochemistry that may be expected to be obtained in a general COPD review was added to those specific investigations that may be taken to identify nutritional deficiency. For example a full blood count and renal function that are commonly taken for people who may exhibit infection or renal impairment secondary to their condition and treatment to the inclusion of phosphate and magnesium for those that may experience a deficiency and/or risk of refeeding. This process is called face validity, which is seen as one of simplest processes to verify the usability of a questionnaire (Parisian and Dunning, 2009). It assesses the appearance of the questionnaire for its viability, readability, consistency of style and structure, including the transparency of the terminology used (Haladyna, 2004; DeVon et al., 2007).

The final questionnaire was designed utilising the feedback from the focus groups and the findings from the literature search, and then aligned to the research objectives that would best fit the quantitative method for the questionnaire;

- Analyse the current nutritional practice of a sample of general practice nurses caring for people living with COPD through a survey.
- Contribute to the body of knowledge about the role of the general practice nurse in the nutritional care of people living with COPD.

- Offer suggestions about the ways in which the findings could inform the nutritional care of people living with COPD in primary care.

Whilst I did not undertake a formal pilot study of the questionnaire utilising my targeted sample, the focus groups of specialist GPNs and lead clinicians involved in the care of people living with COPD facilitated an alternative review of the instrument. This provided me with robust feedback and the ability to modify the questionnaire prior to its formal use within the study. Oppenheim (2000); Parisian and Dunning (2009); and Robson and McCartan (2016) believe that receiving feedback from a questionnaire prior to its use in a study can provide a researcher with the opportunity to review it if the answers received do not sufficiently provide the information relating to the intended research objectives. Morgan (1988) encourages, '...explicit use of group interaction to produce data and insights that would be less accessible without the interaction found in a group' (p.12). As such, I decided to adopt the principles recommended by Fuller et al. (1993); Hughes (1993); Morgan (1988); O'Brien (1993); Wolff et al. (1993); and Parisian and Dunning (2009), whereby focus groups were utilised rather than a formal pilot study. The focus groups supported the refinement of the questionnaire prior to its use.

Response rate

In order to maximise the response rate of the questionnaires, I utilised the principles documented by Edwards et al.'s (2002) systematic review of postal questionnaires: the adoption of colour on the questionnaire, simple formatting, personalised letters and self-stamped addressed envelopes for return, and a short and targeted design aimed at those GPNs with an interest in respiratory care. However, as Kelly et al. (2003) suggest, response rates for postal questionnaires are traditionally low, suggesting a figure of 20%

is common, and recommended that sample sizes should be sufficiently large to account for this. Kelly et al. (2003) believe that targeting a large sample size can in turn support adequate amounts of data being returned which can counteract the poor response rate but still reflect the population and make analysis possible.

A number of other papers report response rates varying between 40% and 50%. A rate of 20% could be viewed as low but there are restrictions on completion incentives, which are frequently utilised in commercial research. However, as Puffer et al. (2004) and Nulty (2008) point out, incentives in the form of financial gain carry ethical considerations and are largely avoided in healthcare studies as a way to increase response rates. In Edwards et al.'s (2002) systematic review of postal questionnaire returns, it was reported that a two-fold increase in responses could be expected where financial incentives were utilised. Nakash et al. (2006) reported there is a lack of robust evidence to support the use of financial incentives and the benefits this can bring to a study in increasing response/participation.

Interestingly, Pit et al. (2014) in their systematic review of physician response rates have demonstrated that financial incentives for physicians to participate and complete questionnaires is commonplace in healthcare research and it has been associated with improved return of survey data. However, as Nakash et al. (2006) and Cryder et al. (2010) recognise the use of financial incentives in healthcare research can present many ethical issues, particularly influencing the return of questionnaires from respondents who may not necessarily have the insight or interest that a researcher was hoping to

gain. Largent et al. (2012) and Head (2009) recognise the ethical and moral issues relating to offering financial incentives to participants in exchange for data.

Head (2009) commented on the work of Sandel (2003:77) in recognising that there are 'some things money should not buy', with recognition of coercion and the concept of corruption. Head (2009) believes that by offering incentives for information to increase responses to questionnaires, both the researcher and participant are entering into a contract where information is no longer voluntary because of the commodification of the process. I wanted to understand the complexity of how financial incentives may affect both the development of my study and the potential financial backing required to offer any form of monetary remuneration. Whilst monetary reward was not an option for my research, it was the ethical implications of such practice presented in the work of Largent et al. (2012) and Head (2009) that confirmed the benefits do not necessarily result in an improvement in the quality and number of response rates achieved by such an approach.

Oppenheim (2000) and Edwards et al. (2002) offered some hope in achieving 'buy in' from a sample in reporting that questionnaires are more likely to be returned when originating from universities rather than other potentially commercial sources. The first questionnaire was sent out by post with a self-stamped addressed envelope with reminders being sent at four-week intervals on three occasions, all of which were on university branded stationery. Oppenheim (2000); Edwards et al. (2002); Puffer et al. (2004); Nakash et al.,(2006); Richards (2007); and Fink (2013) all support the utilisation

of timely postal reminders to increase the response rate and ultimately maximise the credibility of the research. However, it is crucial to balance the desire to increase the response rate without pestering the participants and falling into what Sandel (2003) and Largent et al. (2012) would suggest is coercion. A response rate of 40% was achieved which equated to 201/500 questionnaires being returned by participants following three reminders.

There is mixed opinion regarding adequate response rates in social health science research with an average of 50% being cited as an acceptable return (Baruch, 1999; Richardson, 2005; Nulty 2008). However, research carried out within general practice has reported varied response rates ranging from 25% to 44%, (McAvoy, 1996; Templeton et al., 1997; Bonevski et al., 2011; Phillips et al., 2015), which are often lower than those reported in other groups; therefore, a response rate of 40% appears consistent with the literature in this area of practice.

Data processing and analysis

All questionnaires were checked for completion and numbered in order of receipt before I entered the data into the SPSS programme, Version 21 for Windows. This approach supports the exploration and analysis of data (Pallant, 2016). The Statistical Package for Social Sciences (SPSS) is a data management and statistical analysis tool designed to 'take data from almost any type of file and use them to generate tabulated reports, charts, and plots of distributions and trends, descriptive statistics, and complex statistical analyses' (Waghmare and Shakhale, 2015:461).

Descriptive statistics were used to analyse the data. The categorisation of practice size into five categories from less than 2000 patients per practice to greater than 8000 patients per practice was in line with the model used by Upton et al. (2007). Cross tabulation was used to demonstrate the number of people living with COPD who had registered with them in the categories as defined above.

Descriptive statistics were used to present the nurse's role in care; interventions carried out at a review; access to a pulmonary rehabilitation service; nutritional screening and dietary advice offered to people living with COPD. Common listed interventions for nutritional care, education in relation to nutritional care and the highest qualification nurses held whilst working in general practice were also presented in the same way.

The mean number of years qualified was correlated with perceived role in care; that was, basic, intermediate or advanced using Spearmans Rho. Normality of the data was tested using the Shapiro-Wilk test (Ghasemi and Zahediasl, 2012).

The Qualitative Method

Interviews

In designing the study, I wanted not only to have the opportunity to examine the larger quantity of data that is possible when utilising a questionnaire and predominately asking quantifiable questions, but also the opportunity to explore the thoughts, feelings and experiences of the study sample. This approach aligns itself with a pragmatic philosophy,

by which multiple methods can be used in order to find truth, particularly where one method may not yield the results a researcher was aiming to achieve. I therefore employed the use of interviews for the qualitative part of the research in order to achieve greater exploration of the research question. The survey of GPNs from phase one provided a basic picture of current practice relating to COPD and nutritional care, and demonstrated that whilst there were similarities in the care of those with COPD, there were distinct differences in nutritional practice across Greater Manchester. Phase one of the study was principally aimed at addressing the above objectives, whilst the interviews would provide data relating to the following objectives:

- Analyse the thoughts and feelings of a sample of general practice nurses about their role in providing care for people living with COPD through qualitative interviews.
- Contribute to the body of knowledge about the role of the general practice nurse in the nutritional care of people living with COPD.
- Offer suggestions about the ways in which the findings could inform the nutritional care of people living with COPD in primary care.

There are a number of approaches that can be used to facilitate data collection; these are principally structured, semi-structured or unstructured interviews. According to Kvale (1996), an interview is principally a conversation between an interviewer and interviewee with an aim of gathering information relating to a phenomenon. Somekh and Lewin (2011) support this notion believing that an interview for research purposes is an extendable conversation between two people with an aim of permitting a

participant to describe their view of a certain topic or subject matter. In view of the lack of clarity from phase one of the study, and the very mixed picture of nutritional practice, I set out to undertake unstructured interviews. These are often described as 'open ended', as they permit the interviewee to expand on those issues they feel are important to them as well as the subject or topic area being investigated (Gubrium and Holstein, 2002). Dornyei (2007) believes the advantage of utilising unstructured, open ended interviews is that it provides greater flexibility to follow the natural path of the interviewee, particularly if there are interesting points being raised that may not have necessarily been thought to be pertinent to the research aim. I intended to undertake qualitative interviews to meet my research aim, principally to complement the survey method; this is why I did not have a list of questions from the quantitative phase of the research, instead opening with the prompt 'tell me about the care you provide for people living with COPD'. This is somewhat aligned to the concepts of a grounded theory approach, whereby an overarching question or prompt is asked, and the proceeding narrative is allowed to unfold, with some returning to the data throughout (Wimpenny and Gass, 2000). Subsequent questioning was driven by the participants' responses to the prompt; aided and informed by my experiences in the field, the study aims and data from phase one of the study, where appropriate.

Whilst there are three principal approaches to interviewing, as described above, it is recognised that within the realm of unstructured interviews there are sub-categories, which support and adopt some of the elements of both a semi-structured and a structured approach (Jamshed, 2014). These can be described as non-directive, focussed or informal conversational interview techniques, and can be undertaken alone or in

combination with one another, all supporting the unstructured process (Gray, 2009; Jamshed, 2014). As Gibson (1998) found, an unstructured approach to interviewing people living with mental health problems supported a greater depth of inquiry, permitting the interviewer more freedom and flexibility to respond to the interviewee regardless of how the interview progressed. Gibson (1998) recognised the need to explore what the interviewees felt were important factors surrounding their topic area and as a consequence a richer dataset was yielded, which may not have been possible with a rigid structured approach.

However, whilst I aimed for and more or less achieved an unstructured approach to the interview process, as described above (P.83), I also recognised that my interest in the topic area as well as clinical background was undoubtedly permeating the interviews. As Richards and Emslie (2000) recognise, when a researcher is a professional, with experience in the field, and this is disclosed to the participant, the influence this has on the overall interview can have both a positive and negative impact on the process. Tee and Lathlean (2004) describe this as a blurring of the boundaries between being a researcher and a healthcare worker. However, as Richards and Emslie (2000) point out, participants can either connect with the researcher because of their knowledge and understanding of the topic or avoid reality in some situations for fear of professional judgement.

I certainly experienced a connection with many of the participants and was questioned about my background. I was questioned on my knowledge of general practice and I

informed participants that I was seeking their expert views in relation to their field of practice, but that I had knowledge of nutritional care offered in other settings. I felt this helped to yield data around the topic, although there was evidence in the results of participants defending a position that may not always align to the evidence base underpinning the nutritional care of COPD patients. Participants were generally willing to offer a narrative regarding their work, the care of people living with COPD and nutrition.

Study sample

An invitation to participate in phase two of the study (interviews) was issued to all the lead nurses who identified as having responsibility for caring for people living with COPD in the 500 Greater Manchester practices. The invitation was included with the questionnaires from phase one, and followed up with three reminders as outlined earlier in this chapter. Twelve participants returned an interest slip to participate in phase two of the study, out of the total 200 questionnaire responses received in phase one. Eight of the 12 interested GPNs who had returned their interview slips participated in the interviews for phase two of the study (see Chapter 5, Table 9). Despite sending an interview request slip, three of the remaining four participants failed to respond to further communications, and one decided not to participate following a discussion about the research topic.

Interview setting

The location, timing and type of interview are all critical considerations when undertaking interviews for research. As Gubrium and Holstein (2001) recognise, the plethora of research relating to interview location and the impact this can have on the outcome of an interview and the subsequent data it yields can be significant to a study. They particularly make reference to patient-doctor research highlighting that patients behave very differently in their own environment than they do when in a doctor's office. Participants who are patients are often willing to share more honest and open answers, in greater depth when the power shift moves to a more comfortable and safe environment that makes them feel at ease (Gubrium and Holstein, 2001). This was particularly evident in a study of end of life patients, where the researchers undertook interviews in the patients' own homes. They recognised the environment shifted the power of the relationship towards the participant and their families, and enabled the participants to offer a true sense of their self and their experiences of care in an open, honest and non-threatening environment (Sivell et al., 2015).

Bearing all of this in mind, I decided to offer interviews for phase two of my research. These took place in a variety of different settings, but predominately at the place of work for seven of the participants, with one taking place at a participant's home. I was flexible in the time, location and setting within their environment in an attempt to minimise some of the factors cited in previous research that may negatively affect the participant and ultimately impact on the data obtained. Bolderston (2012) recognised that flexibility must be afforded to participants when undertaking interviews, including the location where they take place. Creating an environment where participants are able to connect

to the topic or subject area being researched is crucial to the outcome of the interview. She purports that being able to connect personalities is important to all other factors and therefore proper planning and experience in interview technique is central to the whole process (Bolderston, 2012).

The relationships between researchers, who are often knowledgeable about the subject of inquiry and their participants, should not be underestimated. I started the process with preconceived ideas about what I was going to find, and because of my experience in specialist nutritional support, I held the view that GPNs, general practice and community services were not doing what they should in addressing the nutritional needs of patients living with COPD. The idea that general practice or community services should be offering nutritional support for this patient group at a much earlier stage in the disease process seemed obvious to me, but it was more of an emotional response to the malnourished patients I had cared for and not supported by robust evidence.

It is not only patient research that can potentially create a power shift relating to the researcher and the participant. It is also evident in research that involves interviewing peers. Raheim et al. (2016) explored the researcher-researched literature and highlighted that healthcare research involving clinicians can be particularly challenging as professionals who become participants often feel cautious about disclosing practice issues. Coar and Sim (2006) reported that participants felt their clinical knowledge could be questioned and in some cases negatively judged by a researcher. They furthermore suggest that in some circumstances professional participants are more likely to be

cautious in what they disclose because of trying to maintain their professional identity, which as Corr and Sim (2006) points out could have implications for the quality of the data obtained.

At the start of the process of interviewing, I was acutely aware of not wanting to come across as judgemental, particularly because of the views I had held when starting the research. My positionality within phase two of the study cannot be underestimated, when the candidates spoke about nutritional aspects of their work, I made the conscious effort not to follow certain threads within the data because I did not want to come across as judging the participants' practice. Ahmed Dunya et al. (2011); Blaxter et al. (2006); D'Cruz et al. (2007); and Gerstl-Pepin and Patrizion (2009) recognise the importance of reflexivity as a method employed in qualitative research. Reflexivity is a process by which a researcher attempts to understand the impact and role they have on their research, the preconceived ideas, positionality and how they view and interpret the research data (Berger, 2015). It was particularly difficult in the first two interviews I undertook, where participants made comments regarding nutritional aspects of their role that I felt were not consistent with that of a nutrition nurse's knowledge. However, it was important for me to try to create an environment where the participants could be open and honest in sharing their views and experiences, so I adjusted my behaviour to facilitate the narrative by not only using positive nonverbal prompts but also positively asking the candidates to expand on points. Overall, I found my experience of interviewing colleagues from my own profession to be an overtly honest and, in some cases, frank discussion about their experiences of working in general practice; I will expand on this in the next section.

Interviews

All eight participants who had agreed to take part in an interview for phase two of the research were emailed an information sheet, outlining the interviewing process, aim of the study and their role; a consent form; and information about the option to withdraw at any time. Prior to the interview commencing, I read the participant information sheet with the interviewee, answered questions regarding the length of time the interview would take, what I would do with the results, when the research would be complete and clarified the overall purpose of the research. All participants completed a written consent form for the interview, and verified their consent verbally at the beginning of the audio recording. Audio-recorded interviews were carried out once with each participant; the longest lasted one hour, the shortest 42 minutes.

Interviewing experienced GPNs was daunting at first, particularly because I had gained an understanding from the quantitative phase of the study that many of the participants appeared highly skilled and perceived themselves to be working at an advanced, autonomous and independent level. Although my knowledge and practice surrounding the subject of nutrition could be viewed as expert, I lacked insight into general practice and therefore initially felt nervous that the participant's priority was focussed on general nursing. When I arrived at the first interview, the GPN was unavailable so I was directed to sit in the practice waiting area. As this was my first interview in this phase of the study, I began to become nervous and when the GPN called me in, she sat me in her treatment room, on the opposite side of her desk and asked what I wanted to know, as if I was in a consultation with her. The power between researchers and the researched can travel

back and forth between all involved in the process (Flyvbjerg, 2001; Gubrium and Holstein, 2001; Chen 2010; Raheim et al., 2016) and I certainly felt this throughout the first two interviews. However, as I progressed through the interviews I became socialised into the culture of general practice and more comfortable with the nature of the environment and the way the participants worked. My confidence developed with active listening skills, and I soon became confident in being able to permit the participant the freedom of an unstructured approach, using pauses to take the participants back to revisit and clarify a pertinent interesting thread.

I used a transcription service for all eight audio-recorded interviews, these were undertaken verbatim using Microsoft Word to document the transcript. Although the captured recordings of the interviews were typed word for word, I recognised early on in the first interview that the audio recordings only captured spoken words. The non-verbal gestures that began to occur in the interview was of equal importance and I asked the participants whether I could take notes throughout the interview. The aim of this process was to add to my thoughts and feelings about the process of preparing, undertaking and concluding the interviews. I documented non-verbal communication such as gestures, head shakes, winks and eye rolls in the interviews in whenever they occurred. It gave me the opportunity to take the interviewee back without disrupting the flow of their point so that I could further explore the significance of their verbal and non-verbal communication, with an aim of unpacking the significance of their verbal and non-verbal cues. Gubrium and Holstein (2001) support this approach in recognising that audio recording interviews only captures part of a participant's story and that a proportion of what an interviewee conveys during an interview is usually non-verbal.

Oakley (1981:41) believes that 'interviewing is rather like a marriage: everybody knows what it is, an awful lot of people do it, and yet behind each closed door there is a world of secrets'. In other words, those secrets refer to unspoken words, things that cannot be captured by voice but can carry significant meaning for both the interviewee and interviewer.

King et al. (2018:77) support the important role non-verbal communication plays in the overall data obtained from an interview, suggesting that not only should audio recording be used, but also note taking should be carried out throughout the process in order to capture the meaning of spoken and unspoken words. During the interviews, I observed a number of participants become animated when discussing threads that related to their work in general practice, relationships with colleagues and frustration at their workload. Whilst the spoken narrative is critical to being able to present qualitative data, as both Siedman (2006) and Kind et al. (2018) recognise non-verbal cues throughout an interview can often shed more light than the spoken word, particularly if it contradicts the narrative. When I left each interview, I sat in the car and reflected on the experience by reviewing the notes I had made in my reflective diary to help me contextualise some of the experiences I noted throughout the process but also between the interviews, which began to help me build a picture of practice and the data. These observations included sitting in the patient waiting area, being positioned on the opposite side of the consulting room desk, waiting 30 minutes in the car for a participant to arrive and a participant spending five minutes looking for nutritional information in a filing cabinet. The reflective diary supported a greater understanding of the role of the GPN. Whilst the nutritional care of people living with COPD was the principal focus of my research,

it became evident during the interviews that this was one of many demands on the practice nurse.

Analysis of the data

Having generated the data, I considered how I would analyse it utilising the philosophical underpinnings of a pragmatic approach. Trahan and Stewart (2013) employed a pragmatic approach in analysing jurors' narratives of solicitors they were witness to during criminal trials. They used a logistical regression for the quantitative phase of their research and a thematic analysis to analyse and describe the lived experiences of jurors in the qualitative phase. Trahan and Stewart (2013) believe that this flexible approach to research supported the breadth and depth of inquiry and fitted well with the ethos of a mixed methods pragmatic design to research because of its uncomplicated and flexible nature.

The data generated from the eight interviews (see Chapter 5, Table 9 for their demographic profile) were analysed using the framework of thematic analysis which, as Braun and Clarke (2006) suggest, 'is a method for identifying, analysing, organizing, describing, and reporting themes found within a data set' (Nowell et al., 2017:2). Thematic analysis (Braun and Clarke, 2006, 2013) offers a systematic approach in exploring data and is particularly flexible in its use as it is not a methodology in its own right; it can be used across various methodologies but is simply a process of finding and reporting patterns in data (Maguire and Delahunt, 2017). The process consists of six steps as seen in Table 7, and discussed later in the chapter.

Table 7: The six steps of thematic analysis

Step 1: Become familiar with the data	Step 4: Review themes
Step 2: Generate initial codes	Step 5: Define themes
Step 3: Search for themes	Step 6: Write-up

Source: Braun and Clarke (2006:16)

In incorporating thematic analysis into their study of childhood obesity in primary care, Redsell et al. (2011) utilised the principles of Braun and Clarke and an interpretive inductive analysis approach to generate their themes. This is where the data drives the themes rather than the wider literature as seen in a deductive or theoretical approach to analysis. It was particularly important for me to carry out the process of analysis in an inductive way because of the lack of research that exists relating to COPD, nutrition and the GPN's role. Whilst Redsell et al. (2011) utilised a computer-based programme to help them identify and generate codes, they commenced their initial data analysis manually and generated codes from the raw data. Hudon et al. (2012) used a similar process to analyse literature related to patient centred care of chronic disease management; the thematic analysis utilised the principles of Braun and Clarke, which Hudon et al. (2012) described as

...familiarization with the data generated ideas to create initial codes. Then, codes that were linked were grouped into potential themes. Each theme was reviewed to ensure that it reflected both its associate coded extracts and the entire data set. Finally, themes were defined and refined by attributing clear definitions and names. (Hudon et al., 2012:171)

Redsell et al. (2011) and Hudon et al. (2012) both demonstrate a degree of flexibility in how they apply the concept of thematic analysis using the principles of Braun and Clarke (2006). This enabled me to see how the theoretical concepts of the process could be

applied in practice and assisted my decision to use a manual process to search and identify themes within my data set, and to rationalise why I decided not use a software package. This will be discussed in greater detail further in the chapter.

Becoming familiar with the data

I utilised an audio transcribing service and once the typed transcripts were received, they were read and reread whilst listening to the audio multiple times to clarify points raised by the transcription service and make corrections where necessary. Braun and Clarke (2006) recognise that using a transcription service is a popular method to accelerate recorded data to paper; however, they also advise that the researcher should spend sufficient time checking transcriptions for accuracy if employing a third party in this process. Whilst I initially decided not to transcribe the data, I used the time to immerse myself in checking the process as described above, which not only confirmed the accuracy of the transcriptions but also helped me gain a feel for initial points of interest. These points of interest could only emerge by understanding the data; therefore, to support the process I made links between the audio-recorded interview transcripts, the recordings themselves and the additional handwritten notes I had made throughout the interviews process (Lapadat and Lindsay, 1999).

Generating codes

Once I became familiar with the data, I started the process of generating initial codes in line with the principles of Braun and Clarke, and the work of Hudon et al. (2012) and Redsell et al. (2011). This was a long process and one that required tags (otherwise known as codes) to be made to certain words or passages within the transcripts. There are several ways of looking for and coding data, one being theoretical thematic analysis

(often described as a deductive approach) as briefly mentioned earlier. This is where the researcher thinks about the overall research question and attempts to identify data with this in mind; some suggest it is a top down approach to generating themes in an attempt to firmly align the data with the research question (Braun and Clarke, 2006). Another method is to use an inductive approach that is primarily driven by the data and not necessarily the research question/s. This approach is more open to uncovering what the data may hold and it is suggested that it is a bottom up process of generating themes, which may not always align to the specific research question/s (Braun and Clarke, 2006).

Whilst I was concerned about what Braun and Clarke (2006) suggest in undertaking an inductive approach, I had designed my study with a degree of flexibility that was underpinned by a pragmatic philosophy by employing unstructured interviews. However, as discussed throughout this chapter, there were elements of the unstructured interview process that were informed by the first phase of the research data as well as my clinical background. Therefore, I was able to influence some of the interviewees in order to direct and refocus the participants towards my research question. I did this when I felt the unstructured interview strayed from my overall research objectives. This subtle approach still provided the participants with the freedom and retained the ethos of the unstructured interview, but provided me with an element of structure.

When commencing phase two of the study, it was important to try to have an open mind in order to understand the context of practice throughout the sample. Phase one of the study had demonstrated a mixed picture of practice across Greater Manchester and no real commonality from the sample, but there were some interesting practices, which

will be discussed in Chapter 6. The unstructured approach to interviewing lent itself to the study, which in turn supported me in reviewing the data and coding it in a way that generated ideas and themes in an inductive manner, rather than looking for the data to fit with the initial research question and the wider literature (which was sparse), and subsequently risking influencing the outcome of the research.

Searching for themes

Once the initial codes were generated across the transcripts, I wanted to visualise connections and relationships in the data and test ideas for themes. Whilst it is recognised that there are software packages available to support this process, as seen in Hudon et al. (2012) and Redsell et al. (2011), it can also be undertaken manually as suggested by Braun and Clarke (2006) in their work on coding. Blair (2015) also recognises that whilst a manual process of coding can take some time, it can also facilitate a greater depth of immersion in the data. Basit (2003) suggests that computer software packages may be more suited to quantifying data; therefore, an exploration of qualitative stories can be more thoroughly examined through a manual process of using paper and highlighter pens among other techniques. I wanted to gain a greater understanding of the data as I had not initially transcribed it. By reviewing, correcting and re-reviewing both the written and audio transcripts, I was able to generate initial codes, which led to the development of subsequent themes.

This was achieved by developing 'concept webbing' or, as Braun and Clarke (2006) describe it, as a thematic map. I plotted connections of data with one another on a flip chart. These were initially codes across the participants such as inhaler technique, blood pressure and spirometry bloods, which evolved to form the task oriented care as seen

in Figure 3. This process enabled me to think about the data not only in an explicit manner, but also to explore subtle connections, which may not have initially been transparent but emerged once visual connections were made, as presented below (Miles and Huberman, 1994; Braun and Clarke, 2006; Wheeldon and Ahlberg, 2012).

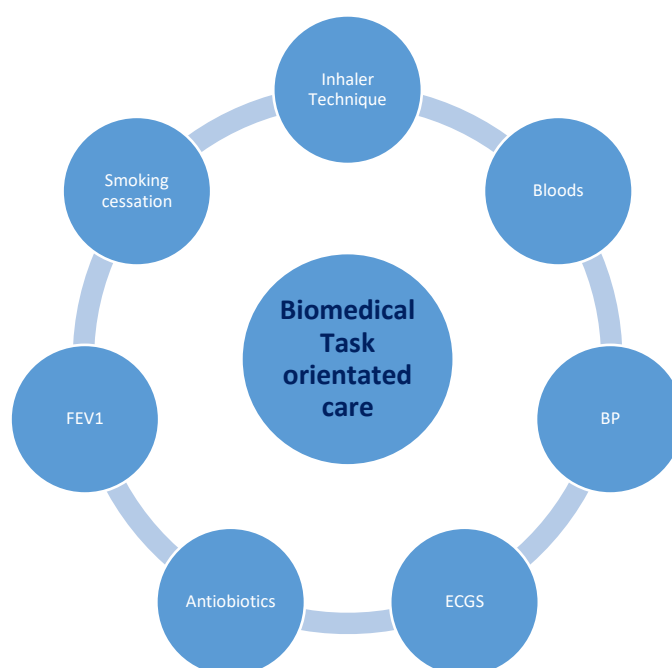


Figure 3: Recurrent codes across the sample, forming the theme-task oriented care

Although concept webbing is not cited within Braun and Clarke's (2006) earlier work, they later recommend the use of 'mapping' to help formulate themes in qualitative data (Braun and Clarke, 2013). They suggest 'visual mapping' can support the construction and development of themes across data sets. Bloomberg and Volpe (2012) expand the concept of thematic mapping and suggest that it can be referred to as 'mental mapping', 'concept mapping' or 'concept webbing'. They suggest it offers the researcher the opportunity to make connections, relationships and test ideas with the data, believing it to be an effective alternative method to using a data package (Bloomberg and Volpe, 2012). It enabled me to identify connections between the descriptions of interventions

such as spirometry, blood biochemistry and ECGs to form a theme of ‘task orientated care’. This process was repeated across the data sets until the emergence of initial themes occurred and supported the process of thematic analysis.

Reviewing and defining themes

As Braun and Clarke (2006) suggest there is no set rule in developing themes from the data; however, the principle is that a theme can be generated by its significance within the data and across the data set. Braun and Clarke (2013) support this suggesting that ‘the themes provide a rich, coherent and meaningful picture of dominant patterns in the data that addresses our research question’ (Braun and Clarke, 2013:249).

In its application to the interview transcription, this can be categorised by how frequently a participant refers to a topic or subject, such as where the participants within the study frequently and confidently spoke about diabetes and nutrition. Therefore, if clusters of data can be connected to a source and if multiple participants refer to the same subject (Bloomberg and Volpe, 2012), a theme can be generated in the case of diabetes. A theme can also be generated if the prevalence of data across the set is considered by the researcher to go some way in answering the research question. Whilst this is considered a deductive approach, Fereday and Muir-Cochrane (2006) and Swain (2018) believe that a combination of both approaches can be used to support the rigour of thematic coding. Whilst my process of coding largely took an inductive approach, I was aware of the need to consider my research question throughout the process. So for example, where multiple participants referred to other disciplines being responsible for nutritional care of people living with COPD, this formed a theme of nutrition and COPD across the data set. Braun and Clarke (2006) define this concept:

A theme might be given considerable space in some data items, and little or none in others, or it might appear in relatively little of the data set. So researcher judgement is necessary to determine what a theme is. Our initial guidance around this is that you need to retain some flexibility, and rigid rules really do not work. (Braun and Clarke, 2006:10)

Critics of thematic analysis suggest that the approach is too flexible, not prescriptive enough, and results in the interpretation of data that can be viewed as unreliable and less scientific than other approaches (Holloway and Todres, 2003). However, as Nowell et al. (2017) recognise, the flexibility of the approach provides researchers with the ability to use thematic analysis in isolation or in combination with other methods. Braun and Clarke (2014) specifically recognise the criticism to their framework in that some believe it is 'not sophisticated' enough or lacks any requirement for 'interpretative analysis'. They refute this, believing there is a lack of understanding regarding the flexibility of the approach, and where thematic analysis is executed poorly, it reinforces negative perceptions regarding its adoption. Nowell et al. (2017) suggest that in meeting trustworthiness, thematic analysis should follow a clear process, which is adequately described and transparent to the reader. Malterud (2001) believes there must be a systematic approach to data analysis, which is clearly communicated to others and can be aligned with the utilised framework. In health research, thematic analysis, in particular the work of Braun and Clarke, is a common approach to eliciting the voice of the participant's experiences. This has been effectively used as a tool to present the qualitative data for those living with mental illness (McCusker et al., 2018), severe wound infections (Knudsen et al., 2018) and those wishing to share their experiences relating to working within the NHS (Ashley et al., 2018). All of the studies enabled me to see how the practical application of the process of thematic analysis could be used as a

tool to support the research process in robustly sharing the experiences of those participating in it and ultimately contributing to the body of evidence for the subject.

The final stage of the process is refinement of the themes, which according to Braun and Clarke (2006) is divided into two phases. The first phase is reading all the coded extracts from the interview transcriptions to ensure they have a connection with one another and relate to the generated theme. The second phase is where the researcher may consider redefining the name of themes or moving data from one theme to another to support a more coherent and connected story. It is plausible at this stage to consider revisiting transcripts to recontextualise data and in some cases, remove extracts from the final thematic map. This is a lengthy process, which took me a considerable amount of time. I moved coded extracts from one theme to another as a story of the participants' experiences emerged. Fereday and Muir-Cochrane (2006) recognise the importance of this stage to the overall credibility of the research by suggesting that it is crucial to reflect back on the previous stages of coding and thematic connections, ensuring assigned codes are representative of the data and reflect the clustered themes as outlined in Braun and Clarke's (2006) six stage phase.

Concluding Remarks

This chapter has described the methodological approach undertaken in order to meet the research aims and objectives. A rationale was provided for utilising a concurrent mixed methods design, which combines both quantitative and qualitative data in order to provide greater breadth and depth to the research. The ethical considerations in designing the study, including the approval process, have been discussed. I have

presented a rationale for the selection and use of my study population, sampling procedure, instrument development for data collection for the quantitative phase, the data collection procedure of using a questionnaire, and the data analysis approach employed for phase one of the research, which will be presented in Chapter 4. I have presented the methodological approach taken in phase two of the study, the qualitative phase, and reported how I prepared for interviews, including considerations of positionality within this research method. The data from the interviews was analysed by using the framework of thematic analysis; a discussion relating to the techniques employed within this approach was presented and these will inform the results of the interviews, which will be presented in Chapter 5.

Chapter 4 – Survey Results

Introduction

This chapter presents the findings from the quantitative data derived from the results of the survey of GPNs by using a questionnaire that was disseminated to all general practices (N=500 general practices) within Greater Manchester. The questionnaire aimed to collect data from the lead nurse responsible for the care of those people living with chronic obstructive pulmonary disease (COPD) at the practice. The number of GPs and GPNs as well as some demographic data about the practice was requested in relation to the patient overall population as well as those living with COPD cared for by the practice. Information regarding education, training and development of the GPN as well as current practice relating to COPD and nutritional care was requested. Of the 500 questionnaires, 201 were returned, equating to a response rate of 40%. Results are expressed as means where appropriate.

The key findings that are pertinent to the research study and offer an opportunity for further exploration in Chapter 5 (qualitative section) and the discussion in Chapter 6 are reported below. The inclusion of data from the questions that have given an overview of current practice in relation to COPD care, nutrition and educational experiences has been included. This was to provide a baseline view in preparation for phase two of the research, where a deeper exploration of the topic area was made through qualitative interviews.

Practice Demographics

The demographic data of how many GPs and GPNs work in practices, be it full- or part-time, across Greater Manchester is presented to contextualise the workforce. The mean number of full-time GPs working in a general practice was 1.9 (with a range of between 0-8 GPs, meaning some of the 54 practices operated with only part-time GPs). The mean number of part-time GPs was 2.3 (with a range of between 0-10 GPs: 43 practices did not employ part-time GPs). The practice demographics are presented in Figures 4, 5 and 6 below.

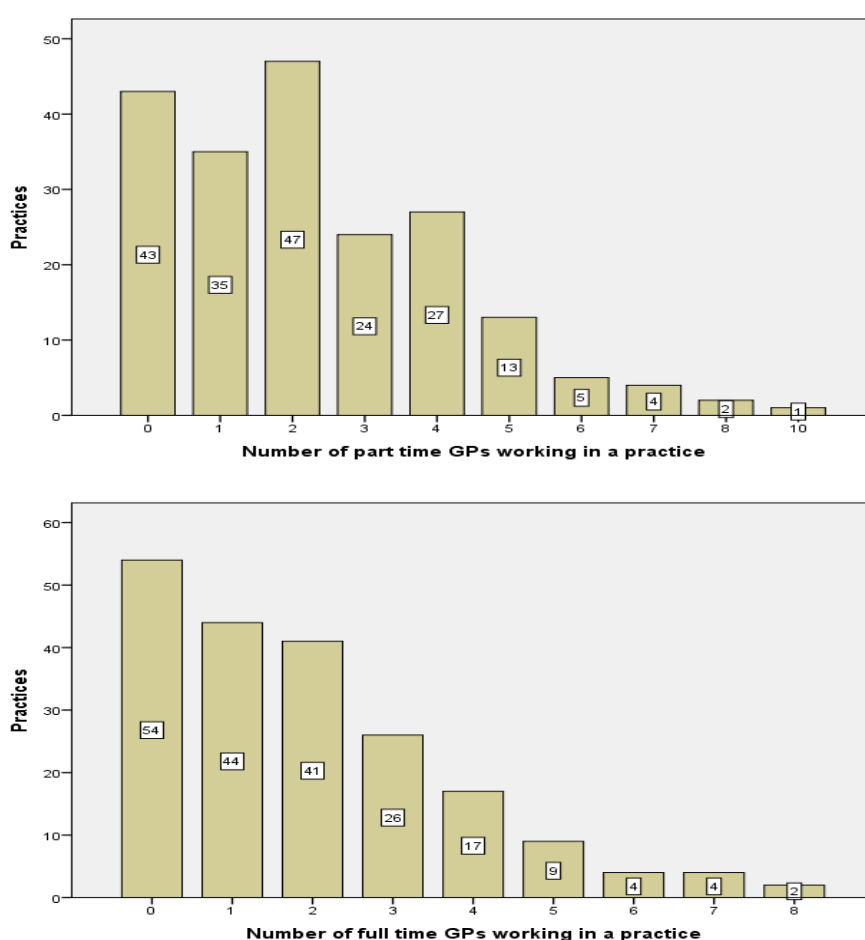


Figure 4: Number of part- and full-time GPs working in practices

There was a mean average of 0.74 full-time GPNs (with a range of between 0-5 GPNs resulting in some 90 practices not employing a full-time GPN). There was a mean average of 1.3 part-time GPNs across the sample (with a range of between 0-5 GPNs, with only 64 practices not employing part-time nurses).

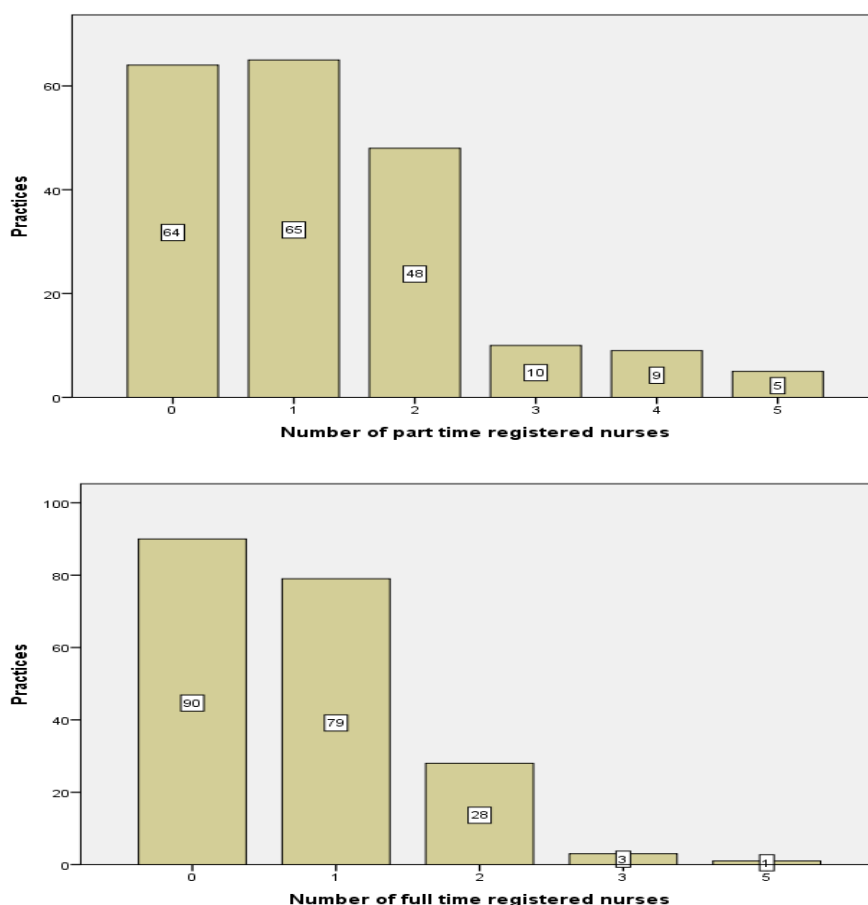


Figure 5: Number of part- and full-time general practice nurses working in practices

The majority of practices (96%) in this study had an overall population size of more than 2,000 patients and a quarter (n=51) had a population above 8,000 (Fig 6).

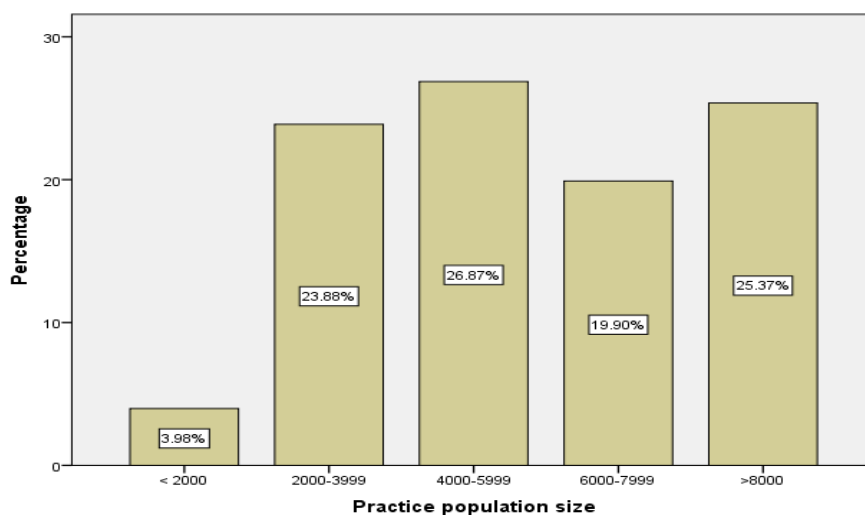


Figure 6: General practice list size

COPD

100% (n=201) of practices cared for patients living with COPD with 191/201 practices responding to the question relating to the percentage of COPD patients compared to practice size: 52% (n=99) of practices had less than 5% of their patient population living with COPD; 5% (n=9) of practices had over 21% of their population with living with COPD (Figure 7). In a recent COPD modelling and prevalence exercise, the North West of England had the second highest prevalence rate out of the nine regions of England (Rothnie et al., 2018). However, it is recognised that there is under and misdiagnosis across areas of the UK, which makes interpretation of prevalence difficult to establish (RCP, 2016). One estimated figure, which seems to form a consensus, is over 1.2 million people are living with COPD in England, equating to approximately 2% of the overall population (Snell et al., 2016; NHS England, 2018).

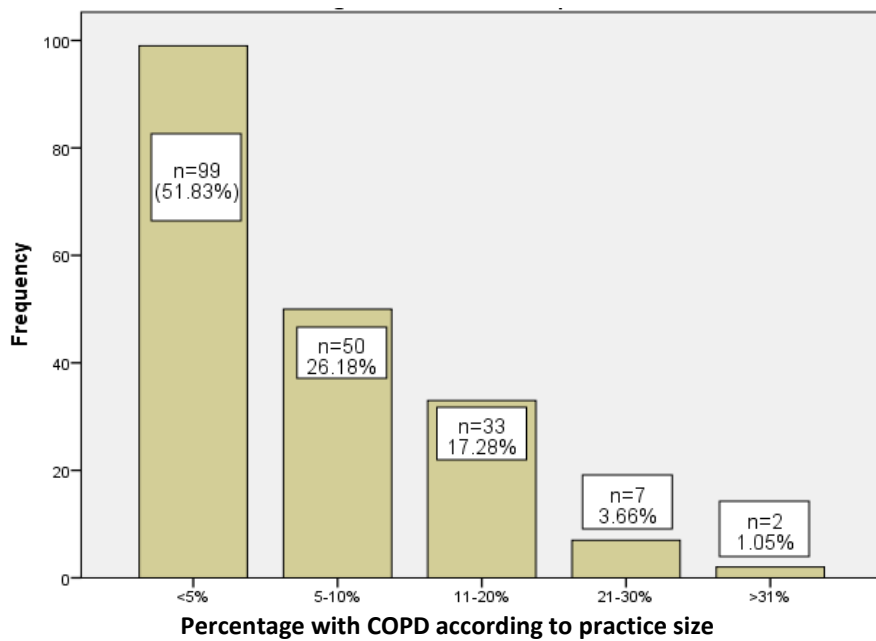


Figure 7: Percentage of COPD patients per practice

Across the sample, 99% (n=199) of patients with COPD were regularly reviewed by a GPN and 58% of these patients (n=115) were generally reviewed on an ad-hoc basis with 42% (n=84) being seen in a dedicated COPD clinic reserved for this diagnosis only. For those practices who had greater than 20% of their overall patient population living with COPD, over three-quarters (78%, n=7) ran dedicated clinics. The cross tabulation table below demonstrates those surgeries/GPNs that ran dedicated COPD clinics or ad-hoc drop-ins against the category of total percentage of COPD patients that practices declared they had registered.

Table 8: Cross tabulation of type of review and total percentage of COPD patients in GP practices

COPDPercentage * Typeofreview Crosstabulation

			Typeofreview		Total
			Ad-hoc	Clinic	
COPDPercentage	<5%	Count	66	33	99
		% within COPDPercentage	66.7%	33.3%	100.0%
		% within Typeofreview	59.5%	42.3%	52.4%
		% of Total	34.9%	17.5%	52.4%
	5-10%	Count	25	24	49
		% within COPDPercentage	51.0%	49.0%	100.0%
		% within Typeofreview	22.5%	30.8%	25.9%
		% of Total	13.2%	12.7%	25.9%
	11-20%	Count	18	14	32
		% within COPDPercentage	56.3%	43.8%	100.0%
		% within Typeofreview	16.2%	17.9%	16.9%
		% of Total	9.5%	7.4%	16.9%
	21-30%	Count	2	5	7
		% within COPDPercentage	28.6%	71.4%	100.0%
		% within Typeofreview	1.8%	6.4%	3.7%
		% of Total	1.1%	2.6%	3.7%
	>31%	Count	0	2	2
		% within COPDPercentage	0.0%	100.0%	100.0%
		% within Typeofreview	0.0%	2.6%	1.1%
		% of Total	0.0%	1.1%	1.1%
Total	Count		111	78	189
	% within COPDPercentage		58.7%	41.3%	100.0%
	% within Typeofreview		100.0%	100.0%	100.0%
	% of Total		58.7%	41.3%	100.0%

Table 8 demonstrates similarities in the number of dedicated COPD clinics and ad-hoc drop-ins in several of the categories between 5%-20%. There is a small increase in the number of dedicated clinics provided, for surgeries who had more than 20% of their practice population living with COPD.

Participants were asked to consider how they viewed their role/practice in the care of people living with COPD as outlined in the model of Upton et al. (2007). Just 6% (n=12)

reported working at a basic level (i.e. the nurse does not autonomously confirm diagnosis or autonomously give follow-up care); 29% (n=58) reported working at an intermediate level (i.e. the nurse autonomously confirms diagnosis but does not autonomously provide follow-up care **or** the nurse autonomously gives follow-up care but does not autonomously confirm diagnosis); 65% (n=131) reported working at an advanced level (i.e. the nurse autonomously confirms diagnosis and autonomously gives follow-up care) (Figure 8); and 93% (n=187) of patients were primarily reviewed by a registered nurse at these reviews (Figure 9).

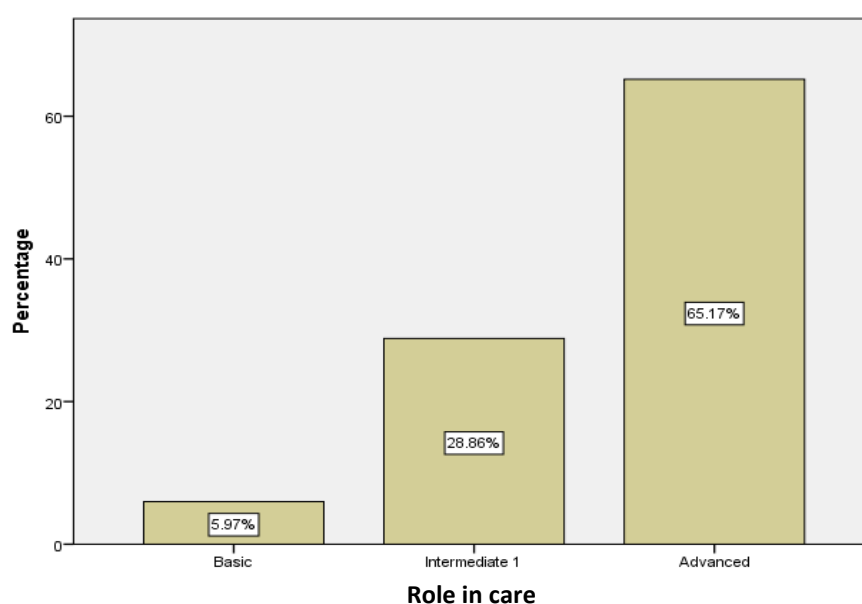


Figure 8: Role in care

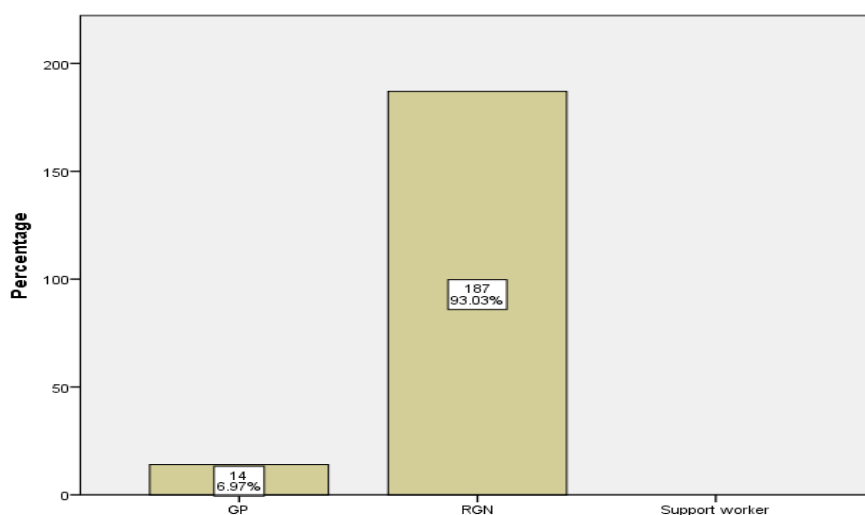


Figure 9: Who primarily sees the patient for COPD review?

During the reviews, nurses reported undertaking a variety of different investigations, which were part of the QOF for the care of those living with COPD. The clinical activities undertaken the least were associated with blood tests (n=127), steroids (n=130) and antibiotics (n=139), which appear to not be as frequently recommended or undertaken as often as other interventions (Fig 10).

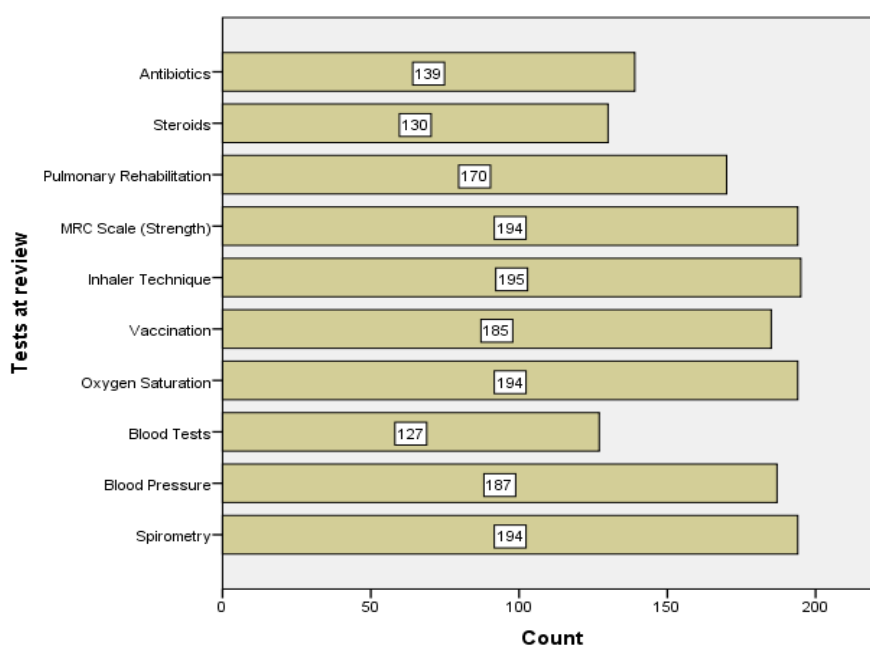


Figure 10: Tests at these reviews

Of participants, 99% (n=199) had access to a pulmonary rehabilitation service with 92% (n=184) of GPNs able to autonomously refer patients without the need for a GP referral.

Nutritional Assessment

Across the sample, 73% (n=147) of GPNs reported nutritionally screening COPD patients with 20% (n=40) indicating they use a validated nutritional screening tool; 19% (n=36) of GPNs used the MUST screening tool; 6% used some other form of validated/unvalidated screening tool, which was largely unknown; and 75% (n=143) did not answer the question. In addition, 74% (n=149) reported using the BMI, and 10% (n=19) undertook weight alone. It appears from this data that some GPNs might not see BMI or weight as a nutritional screen.

Just a third (34%- n=68) of GPNs declared that they took blood samples to identify nutritional deficiency in their patients. A broad range of blood biochemistry were listed on the questionnaire (Appendix 3), and not just those that would necessarily be associated with a nutritional deficiency in a person living with COPD. There was evidence that across the sample of a variety of blood biochemistry being taken to be taken for a perceived nutritional deficiency across the sample. The most common being a full blood count (n=77), followed by renal (n=61) and B12 (n=61). The measures that were obtained the least were phosphate (n=19), magnesium (n=10) and selenium (n=6). Interestingly, nearly three-quarters of the participants nutritionally screened patients living with COPD but this did not appear to translate into taking targeted bloods such as phosphate, magnesium, renal and selenium, which are common measures to support an in-depth nutritional assessment. Many of the results in Figure 11 are not

representative of blood biochemistry taken purely to measure nutritional deficiency but instead may indicate a broad review of health assessment.

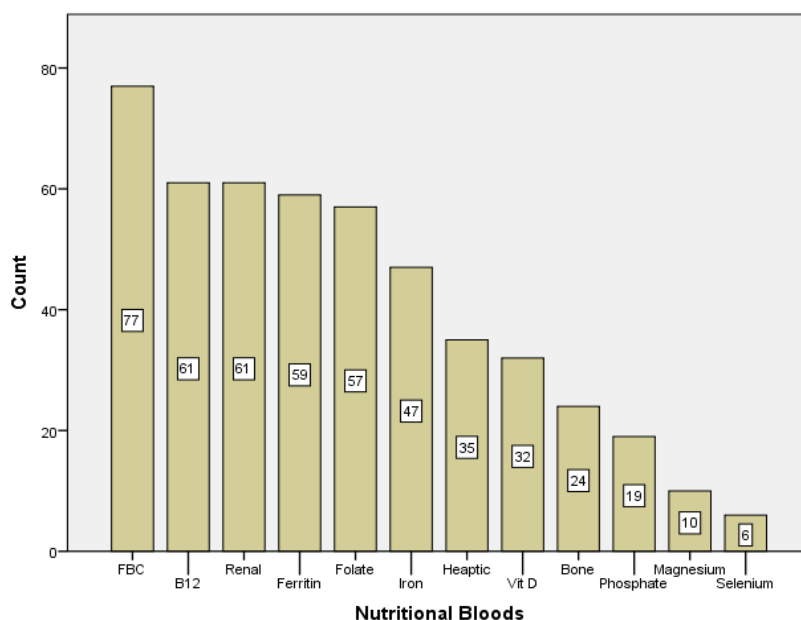


Figure 11: Range of nutritional bloods taken

When looking at the range of blood biochemistry taken, the majority of GPNs taking bloods reported working at the advanced or intermediate level. This was specifically pertinent for magnesium, phosphate, renal and selenium.

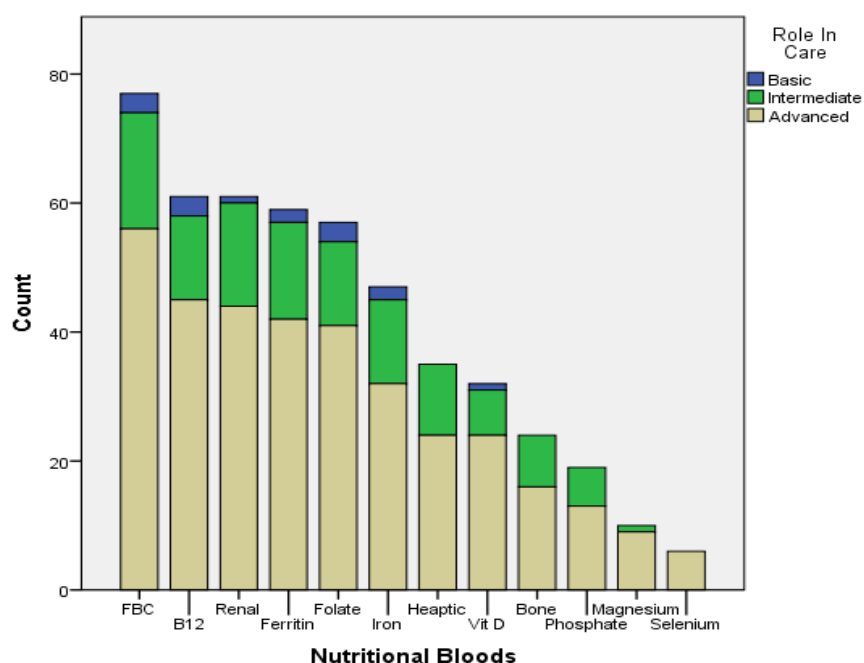


Figure 12: Blood biochemistry across the levels of working

Of the GPNs, 85% (n=171) offered dietary advice to people with COPD: 73% (n=147) principally offered advice for both weight gain and weight loss, with 6% (n=10) offering advice for weight gain and 8% (n=14) offering advice for weight loss; 15% (n=30) of practices did not answer the question. In providing this information, 69% of participants (n=139) reported obtaining information from a dietitian; 45% (n=91) from attending a post-registration course; 32% (n=64) from a website; 30% (n=59) from their pre-registration training; 25% (n=51) from an NHS leaflet; 15% (n=31) from local practice policy; and 10% (n=20) from a charitable leaflet. There are inconsistencies in the ways in which GPNs obtain nutritional advice/information for their patients.

For those participants who specifically recommended weight gain for people living with COPD, 73% (n=147) recommended eating little and often; 41% (n=83) recommended Complan or Buildup; 25% (n=50) advised food fortification; and 14% (n=29)

recommended oral nutritional supplements. The most common dietary changes recommended to COPD patients are also the cheapest and perhaps quickest intervention, whereas all other recommendations implicate some form of cost to either the individual or the NHS. Some of this advice is consistent with the recommendations of the nutritional support guidelines (NICE, 2006); however, there are inconsistencies in approach across the sample.

Prescribing oral nutritional supplements was reported by 14% (n=29) and of this sample 34% (n=10) monitored weight; 14% (n=4) indicated the dietitian took over the care of the patient; 7% (n=2) had monthly weight checks; and the remainder received other forms of anthropometric monitoring. None of the participants reported referring for a GP review; 55% (n=111) of the sample did not answer the question. Blood biochemistry, important for monitoring the risk of refeeding syndrome, did not appear to be documented when oral nutritional supplements were prescribed, although the GP or dietitian may have requested this.

Education

The majority (52%) of GPNs had attended a study day related to nutritional care, whereas 3% had undertaken a specialist module in nutrition. It is not clear from the data what the study day consisted of and therefore what level of knowledge and accreditation they obtained from this (Table 9).

Table 9: Education related to general nutritional care and/or including specifically related to COPD

Training Received	N= (%)
Study Day	100 (52)
Post qualifying Course	60 (30)
No Training	22 (11)
Training by Industry Rep	8 (4)
Specialist Module – Nutrition	6 (3)

The GPN post registration qualifications were as follows, 85% (n=170) of the participants held post-registration qualifications showing some form of continuous professional development, although this may not have been directly linked to nutrition. The most common academic qualification held was a diploma (n=66), followed by the specialist practitioner qualification (n=51); BSc (n=35); and the professional qualification, RGN (n=29). The fewest numbers of GPNs held a BA (n=10); MSc (n=6); and MA (n=4) (Figure 13). In comparison to national data presented by the Queens Nursing Institute (2016) of 3,405 GPNs, those holding a specialist general practice qualification within the sample was just 10.6% compared to 25% (n=51) within the research.

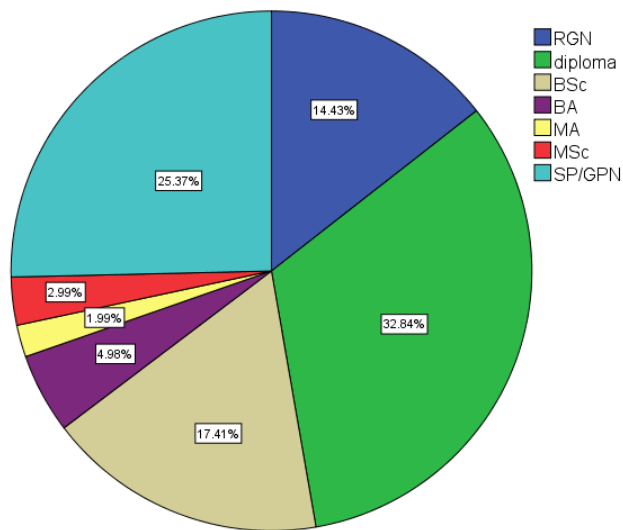


Figure 13: The highest academic qualification held by general practice nurses

Experience

Respondents reported qualifying as a nurse from 1970 to 2012, which demonstrates a range of experience of 42 years with the average length of qualification being 38 years. The majority of the nurses were qualified pre-1990.

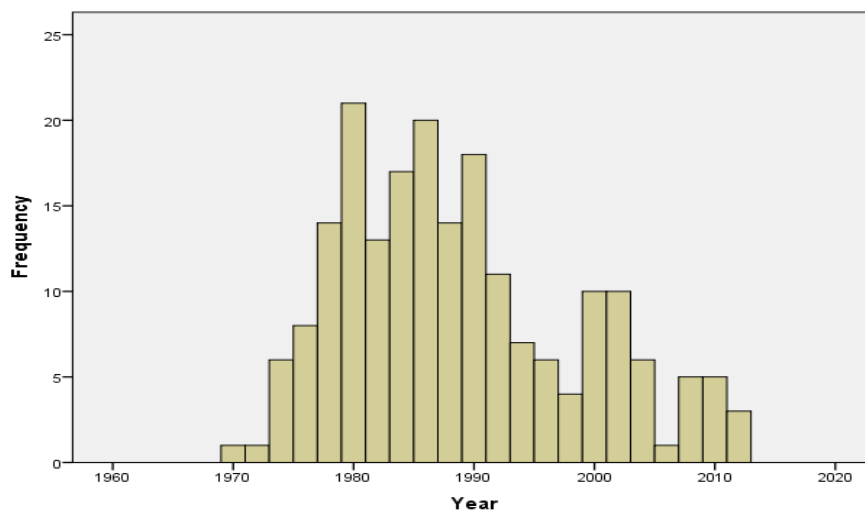


Figure 14: Year of qualification

Respondents reported working as a GPN from 1981 to 2014, which demonstrates a range of experience of 33 years. The mean number of years working in general practice was 14 (SD=7.7).

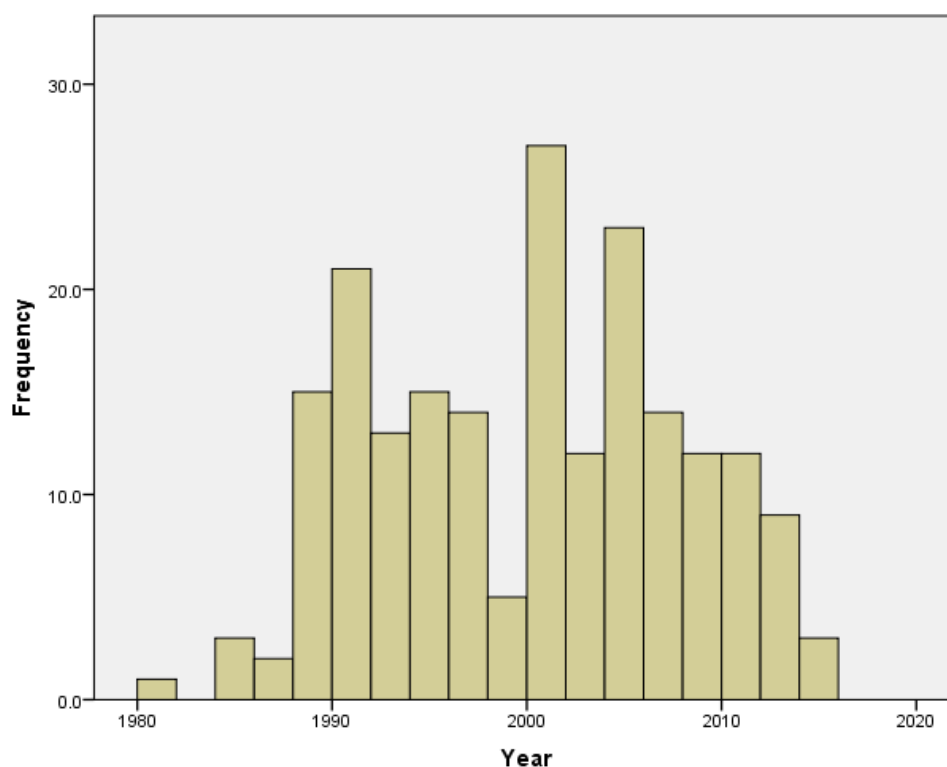


Figure 15: Year commenced as general practice nurse

Across the sample, the mean years of experience working as a nurse was 14. There was a weak relationship (Small effect, Field and Hole, 2003) found between role in care (aligned to the perception of working at an advanced, intermediate or basic level) and the years of experience working as a nurse ($r=.260$, $n=201$, $p<0.001$).

- $r=0.10$ is a small effect
- $r=0.30$ is a medium effect
- $r=0.05$ is a large effect

Therefore, because there was a small effect between the years qualified and alignment to working at an advanced level, there were GPNs who had been qualified for a long period who aligned themselves against the basic or intermediate category, and those who had been qualified for a short period and aligned themselves with an advanced category.

Concluding Remarks

The key points that emerged from this chapter are:

- All general practices included in this study cared for people living with COPD.
- A small proportion (5% n=9) had over 21% of their practice population living with the disease.
- The North West has the second highest prevalence rate for those living with a diagnosis of COPD.
- Nearly all (99% n=199) of practice patients are regularly reviewed by a general practice nurse for their COPD care.
- The majority of participants (94% n=189) aligned themselves to the concept of intermediate or advanced working in the care of people living with COPD.
- Despite nearly three-quarters (73% n=147) of general practice nurses reporting nutritionally screening people living with COPD, only 19% (n=36) had used the nationally recognised tool to do so.
- There was a relationship between the number of patients with a diagnosis of COPD and whether the practice ran a dedicated COPD clinic.

- There was a relationship between the longer a general practice nurse had been qualified and their perception of whether they worked at an advanced level.

This chapter has presented the key findings from the quantitative phase of the research, which demonstrates that general practice employs both full-time and part-time GPs and GPNs across Greater Manchester. Whilst the results of the survey demonstrate similarities in COPD provision, there are some differences relating to nutritional knowledge and practice among the participants. Participants overwhelmingly aligned themselves to the concept of advanced or intermediate working according to the definition provided; this may have been supported by the number of years qualified or the number of years working in general practice, but this assumption did not appear to be as a result of holding an academic degree. The results of this phase of the research will be discussed in Chapter 6 alongside the qualitative phase of the study.

Chapter 5 – Qualitative Results

The aim of this chapter is to present the qualitative data from phase two of the research. The interview data is presented in themes as generated from the coding stage of the data analysis and by using illustrative extracts to validate the thematic process as discussed in Chapter 3 (Methodology). There were eight participants who volunteered to be interviewed in phase two of the study as seen in Table 10. They represented seven local authorities of the 10 boroughs of Greater Manchester. Verdinelli and Scagnoli (2013); Yin (2011); Burke et al. (2005); and Miles and Huberman (1994) support the presentation of demographic data as part of qualitative research in suggesting that a visual display can aid understanding of the research participants and contextualise their contribution to the wider research results.

Table 10: Demographic data of interviewed participants

Participant	Greater Manchester Borough	Length of time Qualified in years	Length of time working in general practice in years	Type of clinic	Patient population	% of COPD patients per surgery
1	Tameside and Glossop	33	28	Adhoc	2000-3999	11-20%
2	Trafford	31	21	Dedicated	>7999	<5%
3	Trafford	30	24	Adhoc	2000-3999	5-10%
4	Stockport	33	16	Adhoc	<2000	<5%
5	Oldham	16	11	Adhoc	6000-7999	<5%
6	Wigan	46	26	Dedicated	6000-7999	>31%
7	Manchester	25	19	Dedicated	4000-5999	<5%
8	Bolton	9	4	Adhoc	<2000	<5%

The themes that emerged following the qualitative thematic analysis were a result of the use of concept webbing (an example is seen in Image 1) which initially helped me think about relationships and meanings within the data and subsequently led to those extracts of data being cut and pasted into Microsoft Word, as seen in Image 2 so that further coding and analysis could be undertaken (Bree and Gallager, 2016; Ose, 2016).

Image 1: Concept webbing

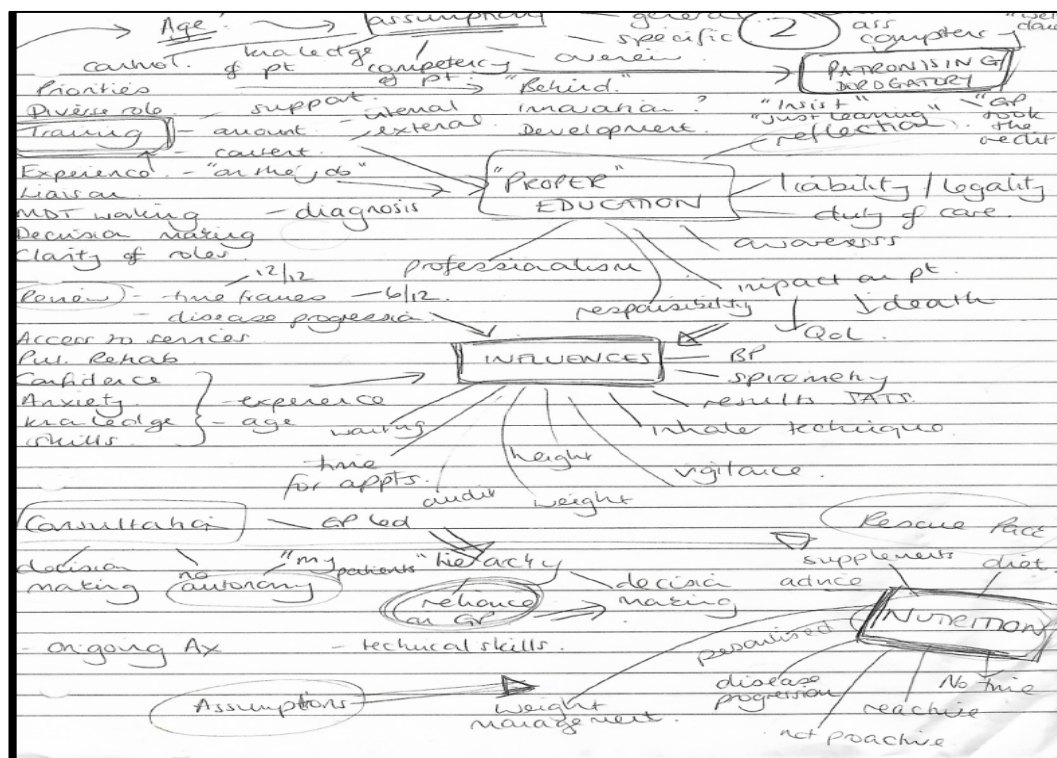


Image 2: Microsoft Word – thematic analysis

Comments extracted from: C:\Users\SS011572\Desktop\Interview Transcripts.docx Created by: MMU User Creation date: May 18, 2017		
Page	Comment scope	Comment text
71	Is there anything you could do for him at this point? P: Maybe send him to the dietitian, revisit him. We do have information that we give and then we try and weigh them regularly as well. If I did think there was some sought of problem I'd do bloods, I do bloods on everyone with weight loss anyway, but if someone can't eat or is having problems eating or just not wanting to eat I'd definitely refer them to the doctor because they might be depressed, which is very common in COPD.	Biomedical Task Orientated Care
71	In terms of the bloods that you mentioned, what would you be looking for? P: We do general bloods, but we do CRPs and look for infection or calcium, cancer markers. Maybe diabetic ones as well, because sometimes you can lose weight. Thyroid too, as that can make you lose weight sometimes. That's about it really.	Biomedical Task Orientated Care
27	You see the patients and you've got your fifteen-minute review, I'm trying to understand why it's done within these frameworks, and would it matter if you didn't do them, and you said "Yes it Would." P: Yes, because they wouldn't get the points. What happens if you do a review and you miss out, say, their MRC3, and you miss out doing their oxygen SATs, that would be a point you'd miss. If you didn't do an FEV1 that would be another point. Inhaler technique - that's another point. You've got to tick all the boxes, basically.	Biomedical Task Orientated Care - reward
7	Most of them have other conditions so you will get things like yearly bloods, which would include a full blood count, liver function, kidney function, HbA1C, whether they're got diabetes or not, because we like to pick them up as quick as we can. Sometimes you see some of the liver function going off, or some of the kidney function going off	Biomedical Task Orientated Care / Investigations
35	These templates... Why would practices use? Because I've heard them mentioned. P: It starts off with height, weight, blood pressure, could put waistband there, couldn't we? Waist circumference. If we added that then that would be a prompt to think about weight. It's on some of the other templates but it's not on COPD. Pulse, things like that. Then it goes onto FEV1 and stuff like that.	Biomedical Task Orientated Care / investigations
58	The annual review just includes getting them in to ask them how they are, do they know how to use their inhalers? Are they on the right inhalers? Doing spirometry, the lung function test, making sure that the diagnosis is correct, because often if they've been diagnosed years ago you found out, once they're on the correct treatment, that they're actually asthma and their COPD has morphed into asthma. That sometimes happens. A lot of it is to do with checking how breathless they, the MRC score, screening for anxiety or depression, general health checks, checking the blood pressure, if there's somebody that still a smoker then smoking cessation, if you think they're also at risk of other things, like heart disease, then maybe screening lipids and Hb1C, if they could be diabetic. It's all part and parcel of a COPD review, depending on the patient. I also see patients for	Biomedical Task Orientated Care / investigations

This led to the generation of themes, biomedical task orientated care; financial drivers; time and resources; nutrition and COPD; confidence – diabetes care; inter-professional/nurse-to-nurse relationships; and education training and role vulnerability. These themes will be presented within this chapter.

Biomedical/Task Orientated Care

The theme of task orientated care demonstrated the approach taken by the participants when assessing someone for a new or continuing diagnosis of COPD in general practice. During COPD reviews, much of the assessment and subsequent investigations were physiologically and in many cases medically orientated. Participants across the sample were utilising methods traditionally associated with those undertaken by a doctor. Many of the investigations the nurses undertook were tasks associated with building a picture of the person's overall physiological condition, and these were evaluated electronically

to provide the nurse with guidance. Participants predominately described this work within the context of the biomedical model. Participant 1, described her role with those with a new COPD diagnoses.

We're not a huge practice but most of our patients feel like 10,000 patients in the day because there are lots of conditions if you've got someone that's COPD, so they're going to have diabetes or heart failure as well. And again, we actively go looking for them, so if somebody comes in with one condition I'll look at them, and if I think "this isn't right", then we'll start investigating to find out what else is going on, so BP blood tests, ECGS, fasting bloods – we just do it all really and try and find them early, with whatever they've got, so that we can look after them the best we can and get the drugs in the right time and the right place. If I'm seeing a stable picture with the spirometry, because I will have spirometry every time I see them, if I'm seeing that stable picture then twice a year is fine, if they may be only on a long acting Quarva or just even using the Beta 2 then I don't feel the need to see them more often. But they know about the open door policy, so if something changes, if they're more symptomatic, sick or coughing up green stuff they can come straight back in and see us. So although I'll say six months, that will be picked up by the doctor checking the records when they're repeating prescriptions. (Participant 1)

The notion of the medical approach was further described by participant 6 as,

We do the routine observations, blood pressure, weight, all that sort of tiddly stuff. We do the saturations. As long as they have had a basic spirometry done, a full spirometry, we then monitor their saturations. We do the oxygens SATs, inhaler technique – very, very important – we do an MRC score, whether they're always coughing stuff up or not, level of FEV1 what prompts it, patient exacerbation history. Compliance... that's always amazing when you're doing the plan. Issuing the rescue pack. We are also offering now a standard pulmonary rehab. I think that's very important. Then we have the flu vaccination. We do have memory tests on the over 55s, and this is all in the same appointment. (Participant 6)

The impact of the biomedical approach seemed more predominant for those patients with multiple medical conditions, whereby the medical nature of the reviews appeared to dominate the visit.

Most of them have other conditions so you will get things like yearly bloods, which would include a full blood count, liver function, kidney function, HbA1C, whether they've got diabetes or not, because we like to pick them up as quick as we can. Sometimes you see some of the liver function going off, or some of the kidney function going off, or albumin can be low when their diet's not brilliant. We do all of those sorts of things. We try and do them annually if we can. (Participant 1)

Although participant 1 referred to albumin as a biochemical measure of nutritional status, an explanation of how this could be used or acted upon was not given during the interview.

Many of the participants spoke about the practice and referred to the team in terms of 'we'. However, it was evident from the interviews that some of the participants were themselves primarily involved in diagnosing COPD:

We've got just under 250 patients that have got COPD at this practice, so it's quite a high incidence. Because I'm the only nurse currently that does respiratory, spirometry, diagnosis of asthma and COPD at the COPD clinics I spend a lot of time dealing with COPD. I also see patients for diagnosis, basically, anyone that's a smoker that's complaining of any symptoms of cough, breathlessness or exertion will get referred to me for spirometry. (Participant 7)

Across the sample, there were some slight differences in some of the tasks carried out at the reviews. All participants carried out a spirometry at some point during the review. It was evident from interviews that spirometry was a time consuming procedure because many of the practices permitted extra time to carry out this task, although some nurses clearly felt overwhelmed by having to undertake this diagnostic intervention.

...we just book a fifteen-minute slot sometimes. If they need spirometry we'll book half an hour appointments. Sometimes they do need it. Sometimes we do an FEV1... and that can be okay... and as long as their symptoms aren't worsening. But if it's full spirometry we do book a longer appointment. (Participant 3)

I've never done so much spirometry in my life. But the practice I came from only had around 1,800 patients. There was about 25 people who had spirometry, and I was there eight years so I knew them all. I didn't have any trouble getting them in because they knew me already and they'd come and were fine with it. It's just getting to know these, I think. (Participant 4)

The participants described their role in the care of people living with COPD in biomedical terms, which were physiologically driven by undertaking interventions to support a diagnosis. Whilst this theme was prominent throughout both phases of the research, it was evident that much of the investigation undertaken, was underpinned by a task

orientated biomedical philosophy of care, particularly when participants felt they lacked time to review other aspects of the person's wellbeing.

Financial Drivers

The questionnaire gave participants options to select physiological measures of wellbeing but phase two proceeded with this theme unprompted. I therefore wanted to understand what drove this practice and it was evident that there was a need to adhere to protocols in the form of national quality indicators. All participants discussed the QOF. This was embedded into a template at all practices, which supported them to meet this national quality indicator. The participants generally described QOF as guiding practice and in turn supporting care at a required standard for a variety of conditions. The practices included in the study used two different patient management systems, although the framework for caring for patients with COPD was essentially the same. A participant who worked across Greater Manchester in two separate localities described her perception of the framework in the following exchange with me.

It is heartening to hear that it's similar from practice to practice but you are working in two separate areas. Do you think if you went to a different area, it would be the same standard? (NW)

Yes, it would be the same. And it will even be the same with different computer systems. Some people use EMIS where we use Vision, Vision plus. But it will be the same template, and the same guidelines. Which is good, I suppose, because at least you know everybody, nationally, is doing the same thing. (Participant 3)

Despite following a national standard, it was apparent that some participants felt constrained by the QOF and the amount of data required in collecting evidence of care provision. Many of the participants expressed frustration at not feeling able to spend more time exploring a wider range of issues with a patient, with one participant saying,

...the QOF has been good and bad. It does make us look quite hard at blood pressure and cholesterol in our cardiac patients. It does make us get the tight control for the diabetics for their HbA1cs. But it misses out big chunks. We have templates to fill in. When we get our patients we bring up a template and we have to fill in all of that template. And there's an awful lot of it, sometimes. You spend more time looking at the screen and ticking boxes than actually looking at the person who's come to see you, which is not very nice for the patient. (Participant 2)

Has it always been like that? (NW)

When I first worked in general practice, the patient came in, we had a little chit chat about how they were, how's the family, dah dah dah. Set them at their ease and then we go on to say "Right, so you've come to us for this, so let's have a look". But now, we just make notes on the paper, and I could stop and talk like now, but when I'm looking at a computer I'm looking like this and you're over there, but I'm ticking these boxes frantically. I don't think patients like it. But, it's the way it's got to be because we have to be accountable, we have to prove that we've done the work. (Participant 2)

There was a perception that the QOF supports practitioners to deliver the same standard of care for all patients with COPD. However, phase one of the study indicated significant differences in the investigations and treatment carried out across Greater Manchester. Phase one highlighted particular discrepancies in care related to investigations, blood biochemistry and nutritional care given to people living with COPD. However, during the interviews participants described a fairly consistent approach, different from that presented through the results of the questionnaires for a COPD review

...what happens if you do a review and you miss out, say, their MRC score, and you miss out doing their oxygen saturations that would be a point you'd miss. If you didn't do an FEV1 that would be another point. Inhaler technique – that's another point. You have to tick all the boxes basically. (Participant 2)

The concept of 'box ticking' was something that was recognised by a number of participants:

QOF drives everything, because that's where we get the money. They get paid for making sure they provide the quality, so it's quality, outcomes... F? I don't know what the F is. (Participant 4)

Framework? (NW)

Yes. Framework. It's basically the government saying, ideally, you should be seeing these patients once a year. The way you prove it is by doing the FEV1. It also says that we have to do an annual COPD review. Just the FEV1 and just to say you've done the review. You tick a box that says I've done the review, and you put the FEV1 figure in and that's it for QOF. (Participant 4)

All participants discussed the role of the QOF throughout the interviews and it was evident from the discussions that the incentive to deliver and evidence for the QOF provided practices with points and supported them in meeting their local and national targets. The positive aspects of quality previously described by some participants with regards to the QOF initiative appeared in some other cases tinged with the recognition that the process was largely about money for the practice. A number of participants raise this:

QOF drives everything, because that's where we get the money. They get paid for making sure they provide the quality, so it's quality, outcomes. (Participant 4)

...we're in general practice so we've got to generate money. That's what it's all about. Well, it's not what it is all about but we have to generate money. If we look at the QOF [searches for QOF on computer]. We've got a QOF timeline, so if there's any asthma, COPDs, diabetes, all that stuff, we get money for doing particular things. (Participant 6)

The impact of the QOF and its financial drivers was so acute for some practices, a nurse described the drive for patient engagement thus:

...we send first, second and third letters. If they don't come by the third letter, despite three letters plus phone calls, plus whatever else we can do, we have a last go just before QOF, which is the last day of March. So in January, February, March, we're chasing all our patients that are reluctant to come in. (Participant 2)

In relation to QOF, why is that? (NW)

QOF is the way we make our money. If we don't collect the points and the pounds our practice goes bust, and our patients have nothing. As long as we're quiet and don't cause any trouble, and we cover the QOF points, they're quite happy. (Participant 2)

Is it that influential then, in your practice? (NW)

Yes. Very. We don't have enough money to scrape by as it is, so we need every pound that we can get. We need to prove that we've earned it. (Participant 2)

The participants described the national framework in the context of a financial driver that is designed to standardise care but is firmly tied to income generation for the activity achieved when caring for people with COPD. The framework appears to support a biomedical physiological approach, in that recording a large proportion of patient physiological indicators results in a payment for that task. Whilst the framework is titled the Quality Outcomes Framework, some participants have suggested that it restricts their practice when interacting with people and is time consuming. Time and resources were common themes throughout the interviews and are presented below.

Time and Resources

All of the general practices within the study were engaged with national QOF objectives for COPD. A number of them aligned their reviews with the minimum requirements of this framework. However, there were a small number of participants within the sample who appeared to suggest they were able to undertake additional activities alongside the QOF requirements at COPD reviews. These nurses appeared to balance the requirements of the QOF alongside introducing a more rounded patient assessment. A participant described the importance of being able to spend the time with people and openly recognised that not all GPNs have this luxury. All of the participants identified the time set aside for a COPD review, which ranged from 10 to a maximum of 40 minutes. One nurse who managed to secure up to 40 minutes described how important time was when undertaking these reviews:

...you want to try and do more holistic work rather than just focusing on that bit of their illnesses. It does tend to take 40 minutes just to do a good COPD review, because if you've got someone that comes in and they're upset because their

husband died last month or they've got family issues, it has to be patient led, that's my feeling, it can't all just be x, y, z, you have to make the patient feel like it's worth coming in because you actually listen to them. I think 40 minutes enables you to do that, I hate it when I hear of surgeries having their timings cut, cut, cut, it's not about just doing spirometry, you want to keep the quality up and luckily the GPs here have agreed that quality is important. (Participant 7)

It became evident that other participants felt that time restrictions played a significant factor in their practice and in turn impacted upon their ability to be able to offer a quality COPD review. Some participants described the notion of being spread thinly across various specialities with others suggesting they rushed through their reviews because of the volume and priority of other patient outcomes within the practice.

At the practice that I work at now we have 16,500 to 17,000 patients. We have two nurses that can see COPD patients, that's all. Although we work full time, I also do diabetes, coronary heart disease, asthma, smears, baby clinics. It's quite tricky to get through the whole COPD list. (Participant 2)

That is a lot of patients. (NW)

It is. I would say... I could have looked this up for you, if I'd thought about it, or if I'd had a minute, I could've told you how many patients we have with COPD, but you're talking quite a large number. (Participant 2)

Another participant described how the QOF requirements impact on the care delivered at her reviews; despite being able to spend at least 30 or sometimes 40 minutes on a review, she felt this was not enough:

I think there's a lot we could do to improve the COPD clinic. It never feels like there's enough time, because when they come in for their annual review it's a very fast whistle-stop, whisking through all the things that I need to ask them and then I'll see if they've got their own issues, which may or may not be related to COPD and how they're feeling, the time goes very quickly. In a COPD clinic, I do get at least 30 minutes per patient, preferably 40 if they're booked in on a designated clinic slot. (Participant 7)

One participant described the pressure of having to see patients with multiple conditions and ensuring her clinics and appointments run to time; she described how this not only influenced the person's experience but also clearly puts pressure on the participants in their attempt to balance the requirements of the QOF:

Now we're in a situation where we're bringing patients in for all the chronic disease management annual reviews in a block, and I'll sit here and say "What do you want to do first, COPD or diabetes?" They come in because they've got to return, now. So, I might do a diabetes review and hold off on the blood pressure and then do one in the COPD review, if they've got good glycaemic control. You learn how to balance things. There's no time! You work it out because of the pressure of keeping to time. One of the horrible things about overrunning in general practice is the patients that walk in and say "Oh, you're running late today, aren't you?" How do you think that feels? Awful, because you're under so much pressure that you don't need to be reminded. (Participant 6)

Time, resources and the financial incentive of the QOF were influencing factors in the care of people with COPD. The participants' ability to recognise and respond to routine discussions of nutrition for their cohorts of people living with COPD appeared connected to income generation. A number of participants recognised that nutrition was either left out of reviews or in some cases prioritised to those who were in the greatest need.

We ask them how many exacerbations they've had in the last year, any antibiotics or steroids, discuss their self-management plan, if we think they can self-manage at home then arrange rescue packs to keep at home. All of that bit is time consuming and I think that's why the chat about nutrition tends to get left. (Participant 7)

In general practice we've got the luxury, I suppose, that we can spend a lot of time with our COPD patients. Obviously there are some time constraints, but we generally get about half an hour. Also in this practice, I go out and do home visits so I can spend a bit longer. We don't look at nutrition in all the COPD patients. It's generally those that are, I suppose you could term it, end stage COPD. (Participant 5)

The participants described how time and resources influence their practice in caring for people, particularly those with multiple chronic diseases. Many described the patient/staff ratio, which was consistent with phase one of the study, where nearly half of practices had patient populations of greater than 6,000 patients but employed a large proportion of part-time nurses. Whilst a number of participants suggested they were restricted by time, one participant suggested they had the luxury of time in general practice, even visiting patients at home. However, the same participant acknowledged that she did not look at nutritional care in all her COPD reviews, just those at risk.

Nutrition and COPD

Many participants made links between COPD care and nutrition. Nutrition was not a QOF outcome and therefore not described in discussions relating to many of the activities undertaken for the QOF at the COPD reviews. However, some of the participants, when prompted, described some level of nutritional care, whilst others indicated they would undertake a BMI and/or weight assessment as presented in phase one of the study.

A number of participants described how they looked for physical prompts with one participant saying that looking thin was a sign of nutritional deficiency. A participant referred to 'normal' or 'average', which in turn reflected her discussions with people about their dietary habits. However, the same participant believed that providing nutritional advice and subsequent interventions at this stage was often too late:

I just never think to ask someone unless they look particularly thin. If they look thin and undernourished, I'll ask them then. But if they look normal, average, it wouldn't even cross my mind to think about it. Where I used to work before there was a little lady. Every time she came in she was even more slight than the time before, and she had a pigeon chest. She had emphysema, and you could tell she was eating little. But at that point it's probably too late to educate them about food. (Participant 4)

Another participant suggested that unless the patient looked ill, it would not trigger a discussion and again referred to the visual prompt making reference to obesity rather than malnutrition.

I think often you forget the importance of nutrition with other disease groups. If they are coming in with diabetes then you are looking at their carbohydrates and their fats and so on, and the cardiovascular risk. If they are coming in with cardiovascular review then you are thinking lipids, cholesterol and could they be diabetic? The onus when they come in with COPD is that you are just thinking respiratory, breathing, inhalers. Unless someone looks ill, or if they are gaining

weight and are becoming obese, I think there is less of a bell in your mind that makes you think you need to ask about their eating habits. (Participant 7)

Another participant demonstrated a similar view to participant 4, in recognising nutrition as playing a part in the care of a person with COPD describing how they offered nutritional advice to some of the patients. However, again this appeared to be those at greatest risk, when it was visibly identifiable and often described by the participant in the study as too late.

We don't look at nutrition in all the COPD patients. It's generally those that are, I suppose you could term it, end stage COPD. You can actually see the build of the patient. You realise that their dietary needs need looking at. (Participant 5)

Several participants assumed that generally there were not nutritional problems with their COPD patient population. One participant indicated that if they recognised a nutrition problem with the patients they cared for, they would raise it. It was evident that when there were concerns about nutritional status, the participants reverted back to diagnostic measures of taking blood biochemistry or considering medical interventions.

No. No, I don't know. I don't know whether it's because we see the patients regularly, they probably are looked after before it gets to that stage. I don't know. Even the ones that are end stage, they're okay. (Participant 3)

Most of the patients that we see here have never said they've got any problems with stuff like that, they don't seem to have that sort of problem, just the one man, and he's end stage. We do have information that we give and then we try and weigh them regularly as well. If I did think there was some sort of problem I'd do bloods, I do bloods on everyone with weight loss anyway, but if someone can't eat or is having problems eating or just not wanting to eat I'd definitely refer them to the doctor because they might be depressed, which is very common in COPD. (Participant 8)

When prompted about nutrition, the following participant suggested that her knowledge was general and in some cases basic, but she still felt this allowed her to give some nutritional advice to her COPD patients, saying:

I would say I've got a general wide knowledge in terms of nutrition in general. It would be a very basic chat that I would have with them, eating little and often and high calorie foods, things like that, mixing butter into potatoes, something to just make it more energy dense. (Participant 7)

Despite participant 7 suggesting she had limited knowledge and gave basic advice, her comments appeared to demonstrate a good insight into some of the first line nutritional recommendations and interventions. Her lack of confidence and inference that her knowledge was basic may have been because of my position throughout the interview as she recognised my interest and experience in nutritional care.

A number of participants suggested they did not routinely discuss nutrition or indeed see it as part of their role in COPD care. One participant suggested it was not part of the QOF:

I would never mention it unless they were particularly malnourished. Then I would say "Are you eating okay?" and hopefully set off a conversation like that. But I wouldn't purposefully add it to my list of things to discuss, It's not on the template. (Participant 4)

I did not probe further when the participant suggested that they would not discuss this because it was not on the template. This was partly because I was taken aback by the comment but also did not want to stifle the discussion, which was open and frank throughout. The comment suggested that the framework template drove the review, which was interesting because the participant had suggested that they worked at an advanced level in caring for people living with COPD and held a specialist community practitioner qualification at degree level. Other participants reinforced this view about a lack of time to provide nutritional care or interventions at COPD reviews. This was not a priority within general practice with some suggesting it should be dealt with by other services:

We don't touch on nutrition at all with COPD. I think it should be part of pulmonary rehab. We can't take any more on. We don't have room for nutrition. I'm certainly aware of nutrition, but it's not part of the standard review. They add a little bit, and add a little bit and add a little bit and it's detracting from patient care. I think group education about food, if you look at Desmond, the diabetes group education, seems to be going like great guns. Why haven't we got something like that, an education session, for people with COPD? (Participant 6)

In exploring why nutritional care did not appear to be a prominent aspect of care for this client group, participants volunteered a number of opinions. One participant (1) suggested the nutritional care of patients was a dietitian's role and she saw a distinct difference between this and a nurse's, one which required special training, which she had not received. In addition, the same participant perceived there were financial barriers, which prevented GPNs from utilising the opportunity to provide nutritional care for all COPD patients:

I am missing part of my training because I do not know more about nutrition, but I didn't go into this to be a dietitian. I went into this to be a nurse. So, I suppose if I do everything I do and then I've got the expertise to send them on, that's as good as I can do. If they decided dietitians were not going to be trained any longer, then that would be a different matter. You would have to do something different. I feel like it's needing to see the bigger picture, and know when to move them on. I mean if I saw the opportunity I would take it and I would do more, but those opportunities in a cash strapped health service don't come along very often at all. (Participant 1)

So you have to accept the limitations of the service really, do you? (NW)

You do. You do. But knowing where to send them on to, or who to get them visited by is probably as good as we can do. (Participant 1)

I found it difficult to respond to participant 1's view of the role of a nurse and dietitian, and agreed with her view of the limitations of the service, partly because I wanted to keep the conversation flowing and because this disagrees with my view.

Another participant (5) said she independently and in many cases proactively referred patients living with COPD to dietitians for nutritional care. She indicated this was part of

a clinical commissioning group (CCG) local policy and cited the national guidance for COPD and nutrition. She went on to say she felt comfortable in providing first line nutritional advice and support, but recognised her boundaries of not being a 'nutritionist or dietitian'. Despite the insight and ability to not only support but also refer patients to dietitians, the same participant indicated later in the discussion that their referrals might be too late saying,

We've got dietitians in the area and we refer to them if necessary. We're not encouraged to use supplement feeds unless they've been assessed by the dietitian. Really, we refer to the dietitian with a COPD patient, but before they get to that they either pass away because of the condition. But, all of us recognise the importance of having enough calories because you're so short of breath and they're burning a lot of their energy. We would look at that, definitely. We'd take that into account. We use templates in general practice, and there's not actually anything on the template, even though it's so extensive, to talk about diet on there, or to prompt us to talk about diet. (Participant 5)

Where does the template come from? (NW)

I did not respond to participant 5's comments regarding patients passing away before being seen by a dietitian because she was in full flow and it was not until the discussion paused at templates, that I asked where the template came from. I thought that the patients were probably being referred to a dietitian too late, but I did not feel confident in exploring this in case I came across as judgemental regarding their practice. As I grew in confidence with the more interviews I undertook, I felt disappointed that I did not unpack discussions like these further.

Some of the CCGs had guidance for practices within their localities, which actively encouraged them to independently refer people with COPD to the dietitians. However, some of the participants recognised the barriers in accessing these services for their patients:

I have to say I have not really referred COPD people to dietitians because the ones that I've tried to haven't been able to go. The odd person has gone. Now, I suppose, because the dietitian is at the diabetes centre so I do not even know if you can even... You must be able to, I suppose. I know the doctors used to refer to the dietitian, but he found them a waste of time. (Participant 8)

In what way? (NW)

He just said they weren't any good and the stuff they'd tell them wasn't great advice. To be honest I've not found it brilliant. You can only see them during the day and you'd have to take time off work and not everyone is prepared to do that. There are no evenings or weekends. No-one will come to your house, which I thought was a bit strange, really. We'd ask what problems they have with their diets and advise them with the information that we have. The doctor is quite a personal doctor; he knows everybody really well. He does a lot of visits, and it works for him, even though he doesn't refer to dietitians anymore. We have a new doctor that has taken over the practice, so she might refer to dietitians. (Participant 8)

Other participants acknowledged barriers to accessing nutritional services, but worked around them where they could. One participant would offer some advice, although this was largely focussed around diabetes and was required to refer back to the GP if she was concerned about the nutritional status of the patient. The GP would decide on what action to take in relation to nutritional concerns. However, when questioned about the process and subsequent follow up, she said:

So we talk about the basics with the severe COPD patients, who I'm more worried about. I talk about trying to have small meals, not being over-faced, small meals regularly, and supplements and things like milky drinks, that they might be able to manage. Things like ice-cream, that they might be able to manage that's got calories in. I suppose, with a patient like that, now everybody's into smoothies, that might be a good way of thinking about it. Lots of people have got these Nutri-bullets, because they were in Aldi. That's a good way of getting the vitamins into them. It's not as good as eating them, but when you've got poorly patients who can't breathe to chew, then maybe that's a way round it. When they go on the pulmonary rehabilitation course, diet is discussed. They don't want to take severe patients and put them in rehabilitation, that's why I like to get my patients in early so that at least they've got their own information pack, and are told that we can re-refer them for a one-off in diabetes, if they've got a problem, if they've been on the course but need a bit of a brush up. But I don't know whether we could do that in pulmonary rehabilitation. I suspect not, because the waiting list is a waiting list. (Participant 2)

When you said you were concerned about some of the patient's nutritional status and you then send them through to the GP, and the GP does? (NW)

I do not really know because when I hand them over, I let that one go. (Participant 2)

The participants have described their experiences, attitudes and practices relating to nutrition and COPD. It is evident through their shared experiences that nutrition is commonly recognised at a later stage in the disease process for people living with COPD, with some stating it was not on their radar. Whilst a number of participants recognised it was important to have general knowledge of nutrition, the majority believed the provision of such care should be part of another service provided either by pulmonary rehabilitation or dietetics. There were a number of assumptions about the appropriateness of providing nutritional care, with some participants suggesting it was often too late, that they lacked education in this area and that dietetic services did not always provide accurate information, which patients and practices valued. Where participants did feel confident in nutritional care and advice was in the area of diabetes, which was a topic discussed throughout all interviews, and is presented in the next section.

Confidence – Diabetes Care

Throughout the interviews, I found it difficult to discuss COPD in relation to nutrition. The majority of the participants steered the conversation to diabetes and its relationship with diet and obesity. It was clear that the influencing factors driving the nutritional care for diabetes patients in general practice was a QOF indicator attached to this intervention. Diabetes and its subsequent nutritional indicator revealed income related activity for general practice. The participants across the sample overwhelmingly

expressed confidence in being able to discuss diabetes related nutritional advice with their patients. Some of the participants drew on very practical solutions with one using a food product label, which she demonstrated alongside what appeared to be comprehensive nutritional knowledge for those living with diabetes.

Participant 5 described the rigorous process for a newly diagnosed diabetic:

...when you diagnose someone with diabetes for the first time, automatically it comes up they need a dietitian review. It's a definite pathway for diabetes. When you're using a template it's trickier to always refer them to a dietitian. Or for diabetic education regarding diet, because they know that if people are overweight, it's the opposite end of the spectrum, that it's going to affect their diabetes and the management of it. COPD is probably a little bit ignored, in that respect, and there isn't a proper referral pathway for COPD. (Participant 5)

Is there any reason for that? (NW)

Like other things, COPD, in comparison to someone with a terminal illness, where everything is really well established and organised, it's a bit of a Cinderella disease. It's only now that it's recognised that they've got the same psychological problems as someone with a terminal condition. Which, in severe COPD, that's what it is. Now they're able to go to a hospice, whereas before they were just left to get on with it at home. (Participant 5)

So do you think things are getting better? (NW)

Yes. But, comparing it to diabetes you can see the differences. (Participant 5)

It quickly became apparent that there was confidence across the sample in discussing the concepts of nutritional care and its relationship with obesity and diabetes but that the role of a dietitian is valued for COPD. The majority of participants provided nutritional diabetes care and openly discussed their engagement and strategies with authority in this field:

I'm not a dietitian. I do my best with diabetes and for diabetes... I'll show you what I do. I try to get them doing carb counting. So I do this, I'll give them this and I show them this lot of stuff, show them how to read it. (Participant 6)

I love the fact you've got a Tesco's Finest there. (NW)

There you are! Lasagne! And they'll say "But it's not sweet." So this is what I do for diabetes. For COPD, to be absolutely honest, I haven't a clue. If I could get a print off, then I'd write on the bottom of it. We Google all sorts! So I tell them to Google whatever food they're looking at, I usually show them Weetabix.

(NW) Did you create this yourself?

I created it myself, because I was looking at the different websites and the dietary advice and it was doing my head in and I thought that if I didn't know what I know, how would I cope with all this? It's a translation of lots of different material to make it simple. Because they're terrified. I did it originally for the newly diagnosed diabetics, because they don't know what to do and it's something reassuring and solid. It says what they can have to eat. You can't apply that to COPD.

Whilst the study was principally about nutrition and COPD, and participants were being asked to describe their role in the care of people living with COPD, diabetes was a common theme among the interviewees, with many responding with healthy eating advice, but importantly recognising the significant role nutrition played in the care of people living with diabetes:

We used to always have the healthy eating plate. We've just had the room decorated so it always used to be there. But we have to use notice boards now, we're not allowed to stick anything up. I used to always discuss that with them, and I would ask them what they would have for their breakfast, to see if it's like sugary cereals or fried foods, and I would tell them to try eggs, or cereal or fruit. Just trying to make more sensible options. More protein, like chicken, fish or eggs, stuff like that, rather than fatty meats. Looking at their bread, how much are they eating? Are they eating loads every day? Just sensible eating, really. (Participant 8)

(NW) Where have you got that information from in terms of your confidence?

In terms of my confidence I think it comes from my own healthy eating, I eat a lot better than I used to. In this job I thought it would be important because you can't tell people to do it when you're not doing it yourself. It really motivated me to do more exercise, because you can't get through to people otherwise, can you? I've got recipes, Weight Watcher recipes, things like that that I offer people. I mean I don't offer them Weight Watcher recipes, but I will say if you want to have spaghetti bolognese use the 5% lean beef mince rather than the 12%.

It appeared there was a significant degree of confidence in discussing nutritional care if it was related to obesity, weight loss and personal experiences of the participants supporting their interventions, with one nurse describing this when probed:

Let me just take you back a bit. Thinking about when you talked about the option of adding things to the reviews. You said you might be able to refer to the dietitian, or refer to the COPD nurse depending on your thoughts. Would you feel confident in relation to nutritional advice? (NW)

Not particularly. (Participant 4)

Why is that? (NW)

I don't know. [Laughs] From my own personal point of view I know about healthy food intake. I do Slimming World and I've lost nearly three stone. I know what constitutes healthy food, I've done weight loss, though, and it's just getting people motivated, that's the main thing. It might just be a small thing that you say that could help people lose weight. I usually say to them "I've lost so much weight with Slimming World. Have you ever thought of doing that?" (Participant 4)

Do you feel that you pull on your professional or personal life? (NW)

More personal, to do with weight loss, because I've been through it myself and they seem to like that. The patients respond better if they can see an example set in front of them. I should have a picture of pre-me, shouldn't I? (Participant 4)

(NW) So you've talked about weight loss. What about weight gain?

That's an altogether different ball game. I, personally, can't see that. I can't process that because I've never had that problem. I've always been the other way round – trying to get it off! When I did a cancer care course last year, we talked about people not really feeling like eating and they had their husband or wife standing over them saying "Try this, try this, try that, try the other" and it puts them off, completely. From that point of view, I'd just tell them to eat what they can. Don't have any worry about how much cholesterol is in everything, put full fat cream on things because that'll give you the energy that you need quicker than eating lots of vegetables. (Participant 4)

Many of the participants recognised the disparity between the two chronic conditions, with a number of participants suggesting this may be related to the common acknowledgement that diet is part of the diabetes disease process and its subsequent

management. However, there was a perception among the participants that diet is not necessarily associated with COPD patients, but other aspects of care are:

Yeah, you can't manage diabetes without doing something about their diet. But you can manage COPD, I think, as long as you're making them feel less breathless.
(Participant 1)

Another participant recognised that a QOF point previously connected to diabetes and nutritional care resulted in general practices receiving income for offering nutritional care to patients living with diabetes. When asked about this, one participant said,

You mentioned about diabetes patients, the fact that you refer all patients with diabetes to the dietitian. (NW)

We offer them a referral to a dietitian at the point of diagnosis. (Participant 7)

Do you not do that with COPD, and if not why do you think that may be? (NW)

I guess because diabetes is more instantly recognisable as a disease that is affected directly by diet and what they're eating. At one point it was part of the QOF criteria that everybody with a diagnosis of diabetes has been offered a referral to the dietitian or a referral for further education about their diabetes.
(Participant 7)

Another participant did not recognise the importance of nutrition for COPD patients in general practice, but acknowledged that when she worked in a hospital setting, she would assess the nutritional needs by using a score for this group of patients. She confidently discussed how she included nutrition for diabetes patients:

It's definitely something that we include with diabetes and whenever we discuss cholesterol, but COPD we just don't. (Participant 8)

That's really interesting. Why do you think you include it with diabetes? (NW)

I just think it's more related to that. With COPD you think you just don't put the two together automatically. It's breathing, and I know you need to be of the right nutrition don't you, but... And when I worked in the hospital and looked at patients you had the, was it the MUST score that you'd use? We used that all the time but in COPD we just don't seem to. (Participant 8)

In summary, participants could see a connection with diabetes and diet and felt this was more easily recognisable as a method of treatment for the disease. They described the

importance placed upon a dietetic review as part of diagnosis and ongoing management and recognised there was a quality indicator attached to providing this care. Their confidence came from identifying the need to lead a healthy lifestyle and drew upon very practical examples when advising patients about dietary matters.

Inter-professional/Nurse-to-Nurse Relationships

It was evident that the working environment could have been influenced by not only the relationships the participants had with their colleagues but also the organisational priorities of their surgeries, which were sometimes difficult. In describing the working environment, participants referred to colleagues who were providing care to people living with COPD but lacked knowledge and experience in this area. One participant said,

We have a sort of meeting once a month. It's very... How can I put it politely? [Laughs] There are some GPs who are very, very good and are good team players. There are some GPs who are dinosaurs, and we shouldn't question anything they choose to do and we should keep quiet and keep out of the way and just generate QOF points. But these are people, I think the dinosaurs are dying. They're going away now. (Participant 5)

Do you have a mixture of that in this practice? (NW)

Yes. There's hope! There's hope for general practice! (Participant 5)

Do you use the term dinosaur to refer to the length of time they've been here? (NW)

When they did their training. Obviously it's their personalities, as well, but there's been a vast change in the training. That's not just GP training, it's medical students. What they've done, they've discovered primary care, because you trained to be a doctor and worked in hospital. (Participant 5)

Is general practice the place they wanted to work? (NW)

Yeah, I wanted to be a brain surgeon. [Laughs] While they're knocking GPs, well, they're not knocking them, they're saying we're very short of GPs, is it surprising? Really? When we've got all this specialist care to provide? I started practice nursing in 1990. These patients, the COPD patients, we basically had nothing to do with them. It was all hospital care, or no care at all, that's how it was. It's just

the workload now that's putting off the young doctors coming into general practice because it's not just patient care, it's a lot of paperwork and things going on, it's not easy. (Participant 5)

It appeared that Participant 5, who described the monthly meetings as a 'sort of' meeting, was devaluing the notion of coming together with her colleagues. The negativity she portrayed in describing the meetings appeared to be connected to the differences in GP practice, with some of her colleagues described as 'dinosaurs'. She implied that she did not have a voice because she was unable to question anything and that her primary function was to generate money and keep out of the way.

Another participant described how she worked on a project on COPD with other GPNs and a GP; however, when it came to presenting the results at a regional meeting the GP attempted to take the credit for the work:

...we did some prevalence work because we thought "Have we got all our COPDs? Not sure". So we got some help from the CCG to get this, and we worked with one of the GPs. He took all the credit, and we did all the work [laughs]. It was quite embarrassing. He stood up at the CCG to say "I've done this work, and this is what I've found" and they were asking questions and he had no idea of the answers. I would say "I think I can help you, because I was one of the nurses along with these other two ladies here". So I got the point across that it's a team that did that. (Participant 2)

Despite the notion of embarrassment at watching this unfold, particularly when the GP was unable to answer questions at a meeting, the participant made her point of getting the message across that the nurses had undertaken the work and went on to suggest the GP was just the figurehead. Some of the participants were the only nurses working in their practices, although others worked alongside one or more nurses, which generated differences in perceived roles, capability and competence. One nurse not only described her nursing colleague negatively but also suggested that the GPs lacked the knowledge relating to the care of patients with COPD:

My colleague would not be doing that. What tends to happen is that she would do the standard template, write down all the results and that's it. She tends to refer to the GPs for medication reviews, which is awful. [Laughs]. They've all got their favourite things, they've all got their favourite inhalers, their favourite treatments, and not necessarily what we'd choose for them. It's not their speciality. They learn things 10-20 years ago and they're sticking with that because they know it works. GPs don't know what we do. (Participant 5)

Participant 5 went on to suggest that she provided a better approach when she reviewed COPD patients and inferred that she had extensive clinical experience. She described her colleague negatively for using a 'standard template' for a COPD assessment and laughed about her referring to a GP for medication review saying this is 'awful'.

A participant described her colleague who was a nurse prescriber thus:

...the junior nurse has been trained up to be a prescriber, and I said to her "You should be getting more pay for that. If I were you I'd be asking, because you're taking on a lot of responsibility". It's a different ball game, when you're prescribing. (Participant 2)

The senior nurse (RN, 2) who was not able to prescribe was responsible in the practice for supporting the junior nurse with her gaining her practice experience. It appeared that there was an element of professional envy towards her colleague. The junior nurse although perceived as theoretically able, lacked what the senior nurse perceived as adequate clinical experience because of the length of time she had been qualified and practising:

I think she's, by nature, an anxious person. She's anxious with whatever she's doing. She's not got an awful lot of self-confidence even though she's academically, really bright. She's got the textbook experience, and she's done the prescribing, which is quite hard to do. She's a clever girl, but she doubts herself. (Participant 2)

A significant proportion of candidates aligned themselves at an advanced or intermediate level of working in phase one of the research. This was defined by working with a level of autonomy when caring for people living with COPD. However, during the

interview process, participants were willing to judge the quality, competence and autonomy of their colleagues, particularly where their training or development may have differed from their own:

When I started I wouldn't do anything until I'd done the training. That's just me, because it risks your registration. But ignorance is bliss, because now she's frightened because she's seeing people with COPD and she doesn't know anything about COPD. Prior to that asthma and COPD were the same thing, but now she's learnt that it's not the same at all. (Participant 7)

In describing the work of her colleague, participant 2 said,

"Oh my god. She did that. Oh no! I wonder if I've ever done anything like that." It brings you back short every year. Also, we know patients sue. And deaths. You think if a patient dies, even though they've got COPD, you think "Have I done everything I should've done to make sure that patient lived as good a quality of life as I could manage?". (Participant 2)

Another participant described how she disapproved of the decisions taken by her practice and despite not wanting to undermine her colleague she took the opportunity to change the prescribed care of COPD patients without the other nurse being aware of this:

I have to wait until these patients come to see me for the annual review and then review what my colleague's said. I shouldn't knock her, it's not fair. She's been put into a position where she's expected to do this work. I think it's through sheer ignorance on the part of general practice, because as I said before, GPs have no idea what we do, no idea. As long as we're quiet and don't cause any trouble, and we cover the QOF points, they're quite happy. (Participant 6)

It was evident that some participants viewed their colleagues in a negative manner, with reference made to their confidence, competence, capability and decision making when caring for people living with COPD. Whilst the research presents evidence of autonomous practice, and in some cases isolated practice, there appeared to be dissatisfaction when working alongside others, particularly nursing and medical colleagues. The education and training to support the care of people living with COPD,

including the vulnerability of those providing care to this disease group is presented in the next section.

Education Training and Role Vulnerability

Throughout the interviews, the participants demonstrated varying levels of confidence and perceived competence when caring for specific groups of patients within general practice. The importance of experience compared to education and training were reoccurring themes throughout the interviews. The majority of the participants felt confident in supporting the nutritional needs of diabetic patients but not those with COPD. In trying to understand the disparity between the two conditions participants were encouraged to discuss them.

Participant 1 recognised her expertise in identifying a nutritional problem for a patient living with COPD, but believed this group of patients should be referred to a specialist practitioner in the field of nutrition. She identified a gap in her knowledge and partly attributed it to a lack of clarity on respiratory study days:

I've done courses, and study days on diet tend to be on diabetes, more than anything. You go to study days on respiratory conditions and you don't get any input from dietitians on those study days. It's more about "This is what you do to remove the breathlessness". (Participant 1)

When questioning the confidence of another participant regarding her knowledge of COPD and nutrition, participant 3 responded:

Not very confident, to be honest, because when we go to COPD updates it doesn't tend to be incorporated, nutrition. They aren't mandatory, these are what we do as practice nurses; the last one, I went to one at Kathmandu restaurant, as well, that was with Dr. XXXX speaking, nutrition doesn't really get mentioned. (Participant 3)

The same participant recognised that patients could be referred for pulmonary rehabilitation, where nutrition was incorporated into the training programme for patients to manage their overall respiratory condition. However, she recognised that information was not formally fed back to the practice, which prevented her knowing what had been recommended.

Sorry, can I just say something as well. Pulmonary rehab does talk about nutrition. So when they go the pulmonary rehab they'll come back and tell you that they've discussed nutrition and diet, etc. So the education programmes do it for the patients. So I told a white lie there. But we don't get anything on updates but the patients do. (Participant 3)

This lack of clarity and communication not only occurred between pulmonary rehabilitation services and general practice, but with other specialist services involved in the care of the same group of patients. Another participant recognised a specialist COPD team would review patients at home but there was a lack of understanding relating to what they delivered for nutrition. The participant recognised her knowledge gap but compared herself to a dietitian.

...but in XXXXX, we do have COPD nurses who go to the patient's home. I don't know whether or not they talk about the nutrition, but because I'm not a dietitian I feel like I'm not at liberty to be the teacher of it. I've not done any nutrition classes or anything like that. (Participant 4)

When questioning participants regarding their education in relation to COPD, the majority of nurses interviewed had access to CCGs or industry study days. They appeared to lack access to formal, accredited academic study. These study days can be useful in updating staff regarding developments in the care of a condition like COPD; however, industry may be promoting their product and or treatment, which could be a barrier to independent thinking. That said, some of the nurses who completed the questionnaire in phase one held specialist practitioner qualifications. These related to general practice nursing rather than specifically to COPD itself, though were part of

university-accredited programmes. Participant 1 recognised the importance of specialist qualifications and the education to support these, but also acknowledged that experience in practice was as important too, stating:

Because they are generally study days for practice nurses, we are maybe seen as generalists, which we are, but with specialist qualifications. I suppose they need to be, in my opinion – nobody else's, more of a recognition about the level of skills and knowledge and experience we have. (Participant 1)

There were assumptions made about the differences between a senior and junior nurse and these were often connected to length of time working in general practice that is, clinical experience. There was recognition that even with training and education, practical experience in general practice was critical. However, even with very little training and in some cases experience, GPNs were still seeing complex respiratory patients. Those that received formal education and training were in some cases viewed by their peers as still demonstrating a perceived theory-practice deficiency. One nurse working alongside her colleague was keen to point out:

You have to have done some COPD training. I have done very little COPD training. I've done a spirometry workshop with COPD. I've done little hour sessions on soundbites of COPD. But, no level 2 COPD at all. The junior nurse is starting to see COPD patients. She's done a six-month course. But although she's done the course she's no experience, so she's running back and forth to me asking [whispering] "What do I do with this one?" Well, what do you think? And she prescribes, you see. (Participant 2)

There are those that recognise the importance of holding academic qualifications to underpin their practice, particularly the participants holding a specialist practitioner and/or minor injuries qualification. Participant 7 believed that education for nurses is so important and recognised that seeing patients without formal qualifications and a lack of underpinning knowledge may leave the nurse vulnerable to litigation.

The GPNs generally indicated that they had received training for nutrition, but this was primarily in relation to how they could support those living with conditions such as obesity and diabetes rather than other conditions. The majority of nurses had attended study days for diabetes, which all included nutrition. The GPNs recognised the absence of a nutritional specialist at study days for COPD, with one participant acknowledging this difference between the two conditions.

Concluding Remarks

The key points that emerged from this chapter are:

- Task orientated nursing appeared to be prevalent across the sample; the concept was exacerbated by the biomedically driven policy of the Quality Outcomes Framework.
- General practice nurses associated the Quality Outcomes Framework with income generation for the practice.
- General practice nurses recognised the importance of income generation for the practice but in some cases at the cost of personal and professional autonomy.
- General practice nurses suggested that people living with COPD, who displayed signs of nutritional deficiency, either were at the end of their disease process or died before a dietitian reviewed them.
- There appeared to be a lack of confidence and knowledge in the nutritional care of people living with COPD, but the same participants demonstrated knowledge and confidence in the nutritional care of people living with diabetes.

- Participants conveyed an impression of conflict between their nursing colleagues, doctors and other staff working within general practice.
- Whilst participants had professionally developed during their time in general practice, access to such development could be difficult and often consisted of industry led study days.

This chapter has presented the findings of the qualitative interviews from phase two of the research study. This has included data from eight participants from across Greater Manchester and is presented under themes generated through the thematic process, which identifies clear threads and associations across the data set and provides evidence of similarities between participants. These were considered important following the coding of data as discussed in Chapter 3. Themes associated with GPNs caring for the nutritional needs of people living with COPD were biomedical/task orientated care, financial drivers, time and resources, nutrition and COPD, confidence and diabetes care, inter-professional nurse-to-nurse relationships, and education training and role vulnerability. The next chapter will provide a discussion regarding the findings of the research from both stages of the study, and the significance of the findings will be discussed against the backdrop of the wider supporting literature associated with these themes.

Chapter 6 – Discussion

This chapter will discuss the research findings outlined in Chapter 4 (Questionnaire Results, p107) and Chapter 5 (Qualitative Results, p124) in the context of contemporary literature. The discussion will focus on the central issues that emerged from both phases of the research, which are presented through the lens of GPNs and in the following sections: nutritional care, diabetes, the Quality Outcomes Framework, biomedical task orientated care, inter-professional/nurse-to-nurse relationships and education, training and role vulnerability and will answer my research aims and objectives. Whilst it is recognised that the nutritional needs of those living in communities with COPD are not just the responsibility of healthcare professionals or the clinical services they come into contact with, it is acknowledged that good nutritional status is an important aspect of the effective treatment of those living with a chronic or long-term condition. The research was aimed at exploring what role the GPN played in the nutritional care of people living with COPD, partly because of the fundamental role provided by them as part of a persons continued chronic disease management.

Nutritional Care

Nutritional Screening

All of the participants who responded to phase one of the study cared for patients with COPD (p110), with a fifth of practices indicating that they had between 10% and 30% of their overall patient population living with the condition (p111). This may mean that some practices have significant numbers of patients living with the disease and three-quarters of practices within the study had more than 4,000 patients (p110). The majority

of practices (93%) had nurses leading COPD reviews for both diagnosis and continued follow-up care, whilst the remainder of COPD reviews were led by GPs (p114). Nearly three-quarters of practices said they nutritionally screened their patients living with COPD as part of the diagnosis and follow-up care. Screening methods varied and included undertaking a weight alone, a full BMI or a nutritional screening tool (p115). Phase two of the study (Chapter 5, p124) explored some of these findings to attempt to contextualise the nature of nutritional care provision and practice for patients living with COPD.

It was evident from the interviews that although the participants aligned their practice in the responses given to the questionnaire to various nutritional activities, phase two of the study demonstrated a different picture relating to COPD and nutrition. A number of participants said that unless their patients looked particularly thin, malnourished or less than a normal or average weight, it would not trigger a clinical response (p136). This was despite the questionnaire demonstrating nearly three-quarters of participants declared they nutritionally screened people living with COPD. The visual appearance of patients can be one useful and crude measure of ascertaining someone's nutritional status; however, it does not specifically identify those individuals who may be experiencing acute or chronic protein calorie malnutrition. As Raja et al. (2008) and Sharma et al. (2016) point out using the visual appearance of a patient can be misleading, particularly because those who look well or are large in stature can be malnourished.

One participant suggested that they undertook targeted blood biochemistry, albumin, to help in the assessment of the nutritional needs of patients living with COPD (p128).

This activity was recorded in the data returned in phase one of the study. Unfortunately, albumin is an inaccurate marker for nutritional status particularly in those with underlying disease processes or raised inflammatory markers, and medical teams have avoided using this method of assessment for some time (Lee et al., 2015; Bharadwaj et al., 2016). The British Association of Parenteral and Enteral Nutrition (2016) highlights five categories that should be utilised when undertaking nutritional assessment; these range from anthropometric measures right through to examining environmental factors. All patients, whether they are thin or overweight, can in various situations require additional nutritional support, particularly where underlying disease effect causes a higher metabolic demand or stress on the body (Gayan-Ramirez, 2018).

A number of participants in phase two of the study had noticed patients who they described as looking visually thin, but felt that it may be too late at this stage to intervene in initiating screening or a treatment plan (p136, p139). This is inconsistent with some aspects of phase one of the study; the survey of GPNs demonstrated that a large proportion of participants screened patients living with COPD for malnutrition; however, when asked to document what this consisted of, it was actually more patchy, with no overall clear method used (p115, p118). One participant described the reason for not screening or initiating treatment was because the patient was 'end stage' (p137). NICE (2010) provide categories for staging COPD patients during their diagnosis and journey of care; this is from stage 1 to 4, with 1 being mild and 4 being very severe. The staging of the disease process involves a number of clinical and diagnostic measures to help practitioners to categorise patients and align them to the stage of their disease process. It does not include a reference to 'end stage'. It only describes the very severe

category (4) as non-response to various medical interventions such as antibiotics, steroids and other medical treatments.

COPD Diagnosis, Staging and Nutrition

It is important to recognise the complexity of diagnosing and managing COPD, particularly in the primary care setting. Strong et al. (2014); Lordes et al. (2014); and Jones et al. (2004) all identify issues, particularly within primary care, and recognised that diagnosis and management of COPD can be challenging including the identification, staging and progression of the disease trajectory. The National COPD Audit Programme for England (2016) recognised that in primary care improvements in practice in identifying, diagnosing and subsequent treatment for COPD were needed. The audit found that only 14.4% of patients on COPD registers had a confident coded diagnosis, and where spirometry had been performed, one-quarter of the values were not consistent with a diagnosis of COPD. Perhaps terms such as 'end stage', which are not used in current policy guidance for staging of people living with COPD are reflected in the inaccuracies in care seen within the national COPD audit results.

A number of participants assumed that offering nutritional support might be too late to benefit some of their COPD patients because in their view the patients were 'end stage' (p135, p136, p137). As discussed earlier, the current NICE (CG-101) (2010) guidance for diagnosis and management of COPD, which was reviewed and updated in 2016, provides a summary section for primary care settings. The guidance categorises the stages of the disease process and aligns this to clinical assessments that should be undertaken within each category for a patient at a COPD review. Interestingly in the categories of 1 to 3

(mild, moderate and severe respectively), nutrition is not mentioned in the list of diagnostic or investigatory measures that should be obtained on an annual basis. However, in the very severe category (4), where a patient should be reviewed six monthly, the clinical intervention recommends 'reviewing the patients nutritional state', which is broad in its scope.

According to the guidelines, nutritional care should be considered in 'very severe' patients in category 4 who are living with COPD. If utilising the principles of the advice in these guidelines, it is unclear what may have influenced the participant's view that offering nutritional support towards the end of the disease process may be too late. As discussed earlier, perhaps it is how the participant defines end stage and whether they relate this to a later stage than very severe, which is the last formal categorisation of the disease process in the national guidelines (NICE, 2010). The GPN could well be excused for mixing up the staging of the disease process, as there appears to be a policy practice gap between what the guidelines term as nearing the end of the disease process and the term that participants appear to be using in practice. I did not question this during the interviews because I was concerned that questioning or taking participants back to this thread may affect the data obtained during the rest of the interviews.

Although a number of participants referred to guidelines, this was principally in the form of the QOF and the systems used within general practice to facilitate the recording of information regarding key indicators and not the wider supporting guidance described above (p130-p132, p146, p150). The participants' concept of the physiological disease process of COPD, and that the terms 'end stage' or 'very severe COPD' are being used interchangeably that causes confusion. Nutritional support has often been provided

when people living with COPD have been unwell, normally much later in the disease process and often in the secondary care environment, when they are in many cases, catabolic. This is where the patient's body breaks down muscle mass to use as an energy source in the absence of adequate oral nutrition. This is because of the increased energy expenditure of a COPD patient due to the abnormal altered respiratory drive, which results in hyper-metabolism and a risk of a patient not being able to adequately meet their nutritional needs (Cano et al., 2004). Whilst a number of studies (Miao et al., 2005; Grigorakos et al., 2009) have recognised the benefits of providing nutritional support to people with COPD who are in the severe stage of their disease process, these studies predominately utilised the artificial route. This is where nutrition is delivered by tube feeding patients often in a critical care hospital environment and it could therefore be that tube feeding is generally not seen as an option in primary care settings.

Nutritional Support

Many of the participants indicated in phase one of the study that they advised those patients that caused nutritional concern to eat little and often, fortify foods and/or consider Complan or Buildup drinks, with the least number recommending prescribed oral nutritional supplements (p117-p118). However, Collins et al. (2012, 2018) suggest that food first and other oral measures have little impact for patients living with COPD; this is where dietitians may recommend increases in standard diet with the use of fortification, such as adding butter, full fat milk and cream, to foods. They found beneficial effects of using oral nutritional supplements over food first for those with the disease and were malnourished, suggesting that the evidence base for food first in this group of patients was weak. They found improvements in respiratory function,

anthropometric measures and grip strength where patients received prescribed oral supplements, but only in those already identified as malnourished and further along the disease trajectory than those with the diagnosis who were not malnourished. This work suggests that nutritional support is beneficial in the later stages of the disease and this contradicts the views of the participants in my study (Collins et al., 2012, 2018).

It is widely accepted that nutritional deficiency can exacerbate overall function for patients living with COPD and significantly impair their health status often leading to hospitalisation and multiple co-morbidities (Baarends et al., 1997, Engelen et al., 2000; Wouters, 2004). Therefore, I wondered why nutritional management would commence when patients are at the very severe stage of the disease continuum, when the risk of increased morbidity and mortality is a real threat. It may be because the competing guidance (NICE, 2006, 2010) does not necessarily support a very clear process for specific disease groups and does not refer to one another despite being regularly reviewed. The literature supports providing nutritional interventions for patients at various stages of the disease process which, coupled with the guidelines, places emphasis on the later stages of the disease process; however, some participants in my research believed this was too late. It recognised that people with COPD do benefit from nutritional treatment, but significantly more when malnourished (Collins et al., 2018). The literature fails to determine at what stage malnutrition occurs in this group of people, which could be the 'very severe' category or earlier in the categorisation process; however, it is evident within my research that it may be too late in primary care settings.

The NICE (CG-101) (2010) guidelines recommend a BMI should be obtained from the patient with COPD, and if this is low, nutritional supplements should be prescribed and augmented with an exercise programme to offset the possible negative effects of weight gain caused by the supplementation. Interestingly, 75% of the sample in phase one of the study declared they obtained a BMI from their COPD patients at a QOF review but just 14% of participants said they subsequently considered nutritional supplements if dietary changes were required. This could be because participants assessed patients as not requiring them; however, during phase two of the study, participants suggested that patients did not like them, and they just ended up on repeat prescription; little monitoring of their effect took place; and a common perception was that a dietitian should assess the patient first (p118, p139-p140). Hubbard et al. (2012) and Simmons and Patel (2006) have noted the cost of and poor adherence to oral nutritional supplements. They suggest there is anecdotal evidence of concerns within the community setting about cost and wastage, but believe that where prescribed appropriately, their use can bring significant benefits to patients who are suffering with protein calorie malnutrition. This concept is certainly supported by Collins et al.'s (2012, 2018) review on the benefits of oral nutritional supplements in patients living with COPD.

There are a number of studies within secondary care that aimed to explore the cost versus benefit of providing oral nutritional supplements compared to a conventional hospital diet (Phillipson et al., 2010; Thornton Snider et al., 2015) for patients with a diagnosis of COPD. The studies demonstrated that those receiving oral nutritional supplementation following an exacerbation of COPD had a positive reduction in length

of hospital stay, reduced hospitalisation costs and a reduced probability of readmission within 30 days.

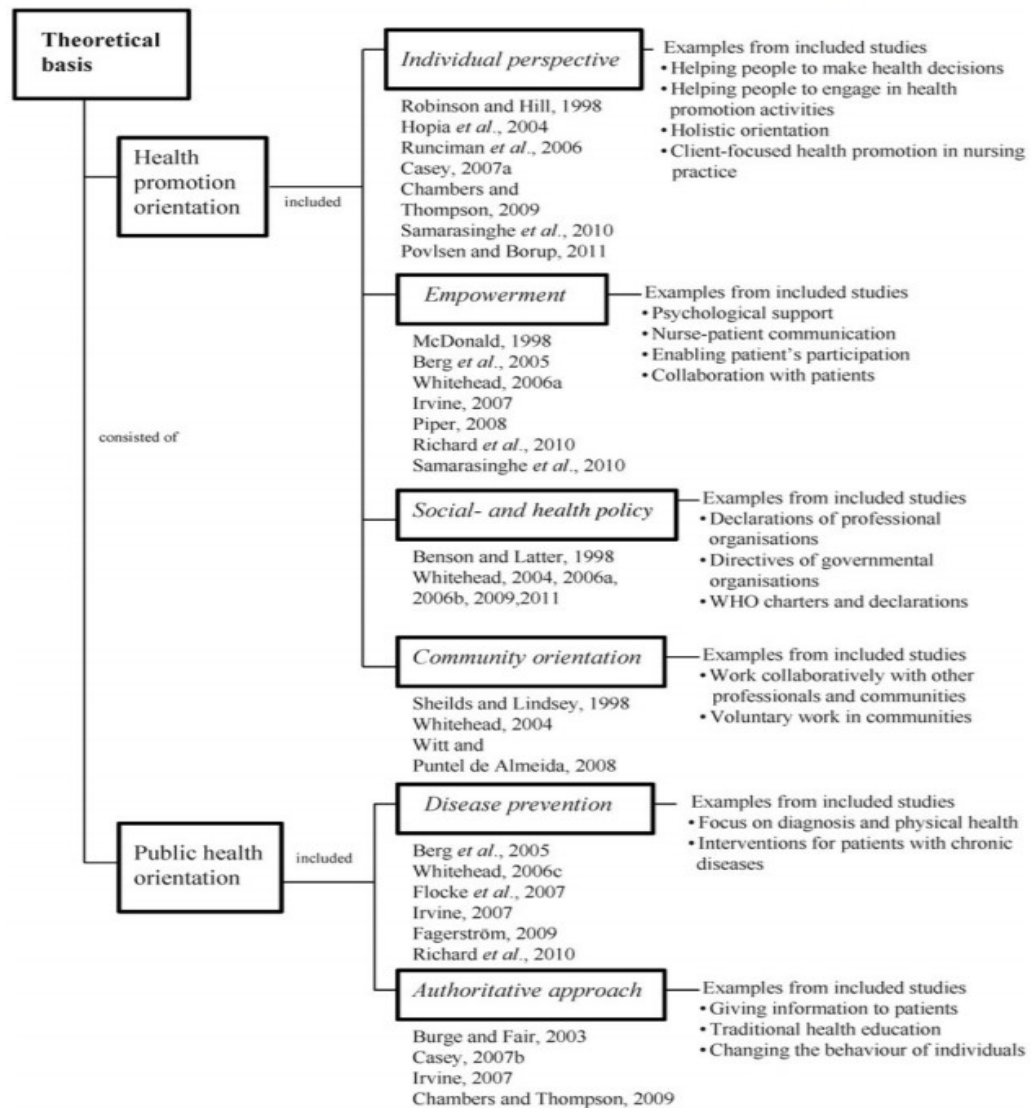
The prescribing and monitoring of oral nutrition supplements was raised throughout both phases of my study, with phase one demonstrating minimal use from a GPN perspective (p118). However, phase two of the study generated much debate in terms of who prescribed the supplement (dietitian, doctor or nurse) and the monitoring of the prescription (p139-p140). There were a variety of different practices with some participants suggesting they were used infrequently because of compliance and cost. Studies like Phillipson et al. (2010) and Thornton-Snider et al. (2015), although focussing on admitted hospital patients, and Collins et al. (2012) on both hospital and community patients, have demonstrated that by including nutritional therapy alongside conventional medical treatment, there can be an overall improvement in the patient's functional status and subsequent recovery from acute illness. Although much of the research is reporting hospitalised patients, it demonstrates the positive effects of providing nutritional supplementation for patients who are acutely unwell and in many cases malnourished.

Perception of COPD, Nutrition and Holistic Care

Some of the participants did not make an association between COPD and nutrition. The majority of participants in phase two of the study said they did not automatically relate nutrition to COPD; some felt the disease was primarily about treating the patient's breathing, whilst recognising that other conditions such as diabetes had a central connection to nutrition (p145-p146). However, this is in stark contrast to phase one of

the study where over three-quarters of the sample indicated they nutritionally screened patients living with the disease (p115). Hence, it is somewhat confusing that participants in phase two did not see the connection or automatically associate nutrition with the disease, despite significant numbers screening people living with COPD. Therefore, the variable use and monitoring of oral nutrition supplements that emerged from the data may have also been affected by the same assumption that nutrition is not necessarily associated with COPD.

Kemppainen et al. (2012) describe two principle models utilised in nursing practice for promoting and managing health. The first being a 'holistic and patient-oriented' approach and the second a 'chronic diseases and medical-oriented approach' as seen in Figure 16. It was apparent within both phases of the study that the participants largely undertook medical diagnostic tests on patients living with COPD. The drivers for these are based upon biomedical disease prevention and authoritative approaches to healthcare. The QOF, which rewards practices for carrying out physiological indicators of disease status rather than a holistic assessment of the person, aligns with this concept. In recognising the components of the model, it could explain why nurses within my study did not generally appear to be aligned to the holistic concepts of individualised, person centred collaborative care for people living with COPD.



Source: Kemppainen et al., 2012

Figure 16: Concepts and examples of the theoretical basis of nurses' health promotion activities

The exercise regime referred to in the COPD guidelines is provided through pulmonary rehabilitation. These programmes aim to deliver a multidisciplinary programme of care for patients with COPD that is individually personalised and planned to improve each patient's physical and social functioning with an aim to improve and sustain good overall health and respiratory function. The multidisciplinary team includes dietitians who are able to review and support the nutritional status of patients and work with families to

achieve a positive improvement to a patient's nutritional status. Whilst some of the participants recognised nutrition as having an important role to play in COPD care in both phases of the study, some believed it should be part of other services offered in the patient's care journey, including pulmonary rehabilitation (p138, p141).

A number of participants expressed the feeling they did not have the time to provide nutritional care as part of the standard review. Some of the participants recommended nutritional care should be part of pulmonary rehabilitation or a specialist dietetic review. However, it was apparent that pulmonary rehabilitation and dietetic reviews were services provided by other NHS organisations, which required a referral into these services. In a number of practices, a GP was required to see the patient and approve these referrals, which meant patients had to book another appointment for this to be actioned at another time. It was not clear how the GPN formally received the feedback from these other services and how this could be integrated within the patient's next COPD follow up; therefore, the patient's journey appeared disjointed at times.

One nurse believed that when she referred on she 'had to let that one go' because of the demand on her time (p141). Mazzotta (2016) describes how nurses grapple with this tension between providing holistic, person centred care and the move towards the largely technological and biomedical model approach to practice, in which GPs operate. This model can often move the focus of nursing attention to the physiological disease and curative interventions of patient care and neglect other fundamental components of care that nurses are responsible for. Almerud et al. (2008) recognised that technological and medical advances, which have developed the role of nurses and nursing practice, do not have to come at the cost of person centred care. They also

suggest that nurses have control over how they practice, and can decide if they put the patient at the centre of the care they provide or be carried along with a systems and models based approach that does not necessarily facilitate holistic nursing practice. Pavlish and Hunt (2012) recognise the immense pressures on nurses and the barriers to providing good nursing practice but believe that the emotional connections nurses can develop with patients are the foundations of nursing practice and that this can facilitate person centred care.

Pulmonary Rehabilitation and Person Centred Care

However, taking this into account a number of the participants acknowledged the role pulmonary rehabilitation played in their overall strategy for managing the disease and believed that this service could support the concept of a person centred approach to patients living with COPD. However, it was interesting that across the sample there were many barriers for patients in accessing this service, one being travel to rehabilitation centres particularly if they lived in rural areas of Greater Manchester. Many participants suggested that not all patients would take up pulmonary rehabilitation; therefore, reliance on patients receiving nutritional advice through this part of their care package would not work. Accessing pulmonary rehabilitation appeared complex across a variety of different areas within the study; as discussed earlier, participants or their GPs were required to refer into pulmonary rehabilitation services. This was because other service providers provided them and in some cases participants reported strict referral criteria, long waiting times and a lack of communication regarding advice given by the service, once the patient returned to general practice.

One explanation for the long waiting times and lack of communication between the services could be found in the Nuffield Trust (Dorning and Bardsley, 2014) report and supported by the vision for increasing capacity for allied health professional (AHP) provision (NHS England, 2017a). This report suggested regional variations in access to AHPs and increased waiting times for patients, which at its worst often resulted in delayed hospital stays for inpatients. The difficulty this presents is that pulmonary rehabilitation services tend to be predominantly led and delivered by AHPs with some services provided by secondary care providers. The shortage of AHPs was recognised by NHS England (2017a) 2020/21 vision, and increased use of allied health staff was to be deployed to compliment traditional medical and nursing roles. However, they recognised improvements were needed in accessing the broad spectrum of supplementary disciplines, which in many cases could only be achieved by improvements in existing services and increasing the recruitment and retention of non-medical disciplines. It was evident through phase two of the study that supporting disciplines such as dietitians, who were frequently referred to throughout the research, were part of pulmonary rehabilitation services and not based in or employed by general practice (p139-140, p144, p146). Participants referred to delays in patients being seen, in particular some dying before they even managed to see a dietitian, and when the dietitian gave advice, confidence in that advice from their patients was low.

Despite these barriers in accessing this service, there were some positive contributions from some of the participants, acknowledging that whilst they did not formally provide nutritional care in general practice, pulmonary rehabilitation offered this within the programme and they noted that patients often came back from rehabilitation and spoke positively about the advice they had been given. However, a number of the participants

said they did not get information on what the patient had been advised at pulmonary rehabilitation or knew about what the service fully offered in relation to dietary advice, despite referring the patient. The pulmonary rehabilitation services across Greater Manchester generally see patients for a period of eight weeks before discharging and handing back to general practice care. Thus there appeared to be a lack of inter-professional working and rigid role boundaries which seemed to result in poor communication across professional groups, which translated into disjointed care and an increased risk to patient safety. A similar finding with readmission to hospital with those with COPD was reported by Shah et al. (2016); they found that communication across and within healthcare sectors was in many cases disjointed. Many parts of the healthcare system worked in isolation to others, which resulted in an increased risk to patient safety. The appearance of a breakdown in communication between pulmonary rehabilitation and general practice within my research could affect the continuity of care and as Baird et al. (2016) suggest it is a key factor in reduced patient satisfaction within general practice (Baird et al., 2016).

Guidelines

There was no formal reference to COPD guidelines and nutrition documented on the results of the questionnaire in phase one of my study (Chapter, 4). The subject of nutritional advice/guidance emerged throughout the interviews with one participant searching a filing cabinet to find a pathway for assessing the nutritional needs of this client group. The participant said she remembered that she had been given something relating to this area of practice and it reminded her to find it when I was coming to interview her. This appeared to suggest that the pathway was neither at her fingertips,

nor commonplace in everyday practice because it was filed away. As the interview developed, the same participant referred to 'reawakening the subject of nutrition' but that they did not have time to provide all care, so this is what got left out (p134-p135). Whilst a number of participants referred to leaflets regarding diet and nutrition they could print off or give out to patients, all of them made reference to it being part of somebody else's role or service.

Perhaps the volume of guidelines, pathways and literature that are seen within everyday clinical practice overwhelm practitioners, particularly where they do not specifically relate to the provision of the service being delivered in that area or fail to connect to other guidelines that support practice. Carthey et al. (2011) believe that the plethora of guidelines and policies currently in use across the health service can be like information overload for staff. They recognise that guidelines and policies need to be relevant to practice in order to gain support from the staff who are to use them in practice. The complexity, length and application to practice must be considered, as staff often have to try and recognise competing agendas at a national, regional and local level, which often creates conflict and noncompliance (Carthey et al., 2011). The key driver in joining up these guidelines could be the QOF; if nutrition was seen as an integral part of the quality standards and financially rewarded, then practice buy in may follow.

However, one may question the importance of guidelines, policies and frameworks. The GPN role is one that is associated with the concept of autonomous practice and therefore perhaps nurses draw upon previous experiences to support their practice rather than the plethora of guidelines. Traynor et al. (2010); Stubbings et al. (2012); and Melin-Johansson et al. (2017) acknowledge the importance of guidelines and policies in

nursing practice, but also recognise that nurses are often overwhelmed by the vast number intended to guide practice. They recognise that the years of experience in practice often influence a nurse to draw upon their previous experience of situations and in many instances use intuition to support their decision-making in practice. This can subsequently result in a lack of awareness of current changes in practice and knowledge of contemporary evidence and guidelines, which should be supporting care (Traynor et al., 2010; Stubbings et al., 2012; Melin-Johansson et al., 2017).

My research data certainly supported the notion that the majority of my participants perceived themselves to be working in an autonomous role in caring for people living with COPD, be this in an intermediate or advanced category as defined in phase one of the study (p113). The majority of participants were experienced nurses, with an average length of time in general practice being 14 years; it may be that they felt they did not need additional guidelines other than the QOF to support their practice. Health Education England (2017) certainly promotes the notion of the autonomous and independent role of the GPN as a key selling point to improving recruitment and development in this field. However, they go on to indicate that the autonomous and independent nature of the role delivers care by utilising the best available evidence. Stevens (2013) points out clinical guidelines are essential in improving the quality and safety of the patients we care for, whilst Pearson et al. (2012) believe that nurses have a responsibility to continue to deliver evidence based care, which is safe, effective and current and one may suggest can only be carried out by utilising guidance to support practice.

There are a number of published guidelines relating to the care of those living with COPD, particularly referencing the role of general practice (DoH, 2004; NICE, 2010; GOLD, 2017). These guidelines are important in guiding evidence based practice and ensuring a standard is achieved for the specified conditions. However, a key policy driver for the care of COPD patients in general practice that emerged throughout the study was the QOF (DoH, 2003b), and this was largely associated with the financial incentive that drove the implementation and ongoing delivery of this policy in practice. There was only one participant who referred to other guidelines during both phases of the research (NICE, 2010; GOLD, 2017), but believed that the NICE (2010) guidelines were out of date because of the original publication date, despite these being reviewed in NICE (2016). Whilst reference was made to the GOLD (2017) guidance, it was believed it did not support nutritional care. This assumption may be a result of the lack of robust recommendations for practice within the GOLD (2017) report; it does refer to nutrition 20 times but unfortunately fails to give clarity on implementing the broad points in the guidance.

The lack of a joined up approach to guidelines, algorithms and policies that drive practice could be reasons behind nurses' lack of awareness and engagement in them. Abrahamson et al. (2012); Colon-Emeric et al. (2007); and Scott et al. (2003) believe that nurses do not have the time to understand the complexity of guidelines, partly because they are too busy, but also because they do not always relate to them. Jun et al. (2016); Bahtsevani et al. (2010); and Quiros et al, (2007) infer nurses want easy to understand simple guidelines that support the delivery of practice and ultimately help them to contextualise care. However, as discussed earlier, it may be that nurses draw on their

previous experiences and develop the confidence to use their intuition to support their practice.

There is little detail about appropriate nutritional care for people living with COPD in both the NICE (2010) and Gold (2017) guidelines. The authors might assume that practitioners have existing knowledge or that a referral to a nutritionist/dietitian would take place. This makes the implementation of the guidance difficult in practice because there is an assumption on supplementary depth of knowledge for the area of nutrition. This was evident in the way the final nutrition recommendation in the NICE (2010) guidance directs readers to another NICE (2004) guidance document for nutritional support (CG-32). This is a broad and complex guide to oral, enteral and parenteral nutritional support, which offers in-depth recommendations for practice per se but does not connect to disease specific treatment and therefore offers no guidance to COPD or pulmonary conditions. Whilst it is recognised that nutritional support can be aligned to disease related malnutrition, it may explain why some professionals and in particular participants detach themselves from guidelines, because of the lack of connection to COPD specific related advice. However, the broad and detailed overview in the NICE (2004) nutrition guidelines details the benefits of nutrition support in calorie protein malnutrition and provides a comprehensive starting point for all services regardless of its specificity.

Whilst reference is made to general practice in the NICE (2004, 2010) guidance, and nutrition is mentioned in both the NICE and Gold (2017) report, albeit briefly, participants made little reference to them throughout both phases of my study. The benefits of providing nutritional care did not appear to be as prominent as other aspects

of respiratory care undertaken by the participants in general practice; the majority of interventions were all included within the NICE (2010); GOLD (2017); and QOF (DoH, 2003b) guidelines. However, as Fischer et al. (2016); Rycroft-Malone et al. (2012); and Grol and Grimshaw (2001) suggest, the adoption and implementation of clinical guidelines can be very challenging. A number of barriers to successfully supporting implementation have been cited, which include lack of knowledge and attitudes, and external factors such as poor dissemination, communication and lack of training and education. The participants in my study demonstrated that whilst there were opportunities to develop their knowledge, there were issues of funding, which was patchy across Greater Manchester (p150-p153). There was a lack of time to study further, opportunities for continuing professional development were limited and the most commonly held qualification was a diploma, despite the average length of time participants had been qualified being 33 years.

COPD, Nutrition and the Evidence

Over the years, a number of studies have tried to demonstrate that providing additional nutritional support for patients living with COPD in the form of increased amounts of oral diet and/or prescribed oral nutritional supplements can have a positive effect on the patient's overall clinical status. However, the studies involving nutritional support for COPD patients have in some cases (Vermeeren et al., 2004) only demonstrated increases in energy, protein and weight gain and failed to provide positive outcomes for improving the critical elements of lung function and muscle strength. A Cochrane review (Ferreira et al., 2005) supported this view, and may well explain some of the negative views between nutrition and COPD that have been held by professionals in clinical

practice. The Cochrane review was updated in 2012 (Ferreira et al., 2012) and demonstrated that providing oral nutritional supplements in addition to oral diet for two weeks or more can have a beneficial impact on lung function, muscle strength and quality of life for patients with COPD. Bool et al.'s (2017) work supports the findings of the Cochrane review (Ferreira et al., 2012), in that utilising oral nutrition supplements with a group of COPD patients undertaking pulmonary rehabilitation had a positive effect on nutritional status and inspiratory muscle strength, which in turn positively influenced physical activity and overall functional outcome. The study went further by recognising the significant benefits of providing oral nutritional supplements by seeing overall depression scores improving for people living with COPD.

As discussed earlier, Ferreira et al. (2012) and Bool et al. (2017) have primarily focussed on the medical and more scientific aspects of COPD, defining quantifiable measurable outcomes such as lung function and muscle strength. However, I suggest it is equally important that quality of life in relation to nutritional support and the disease trajectory be integrated as a key outcome into research for COPD patients. In recent years, there has been an acknowledgement that providing nutritional support for cancer patients in the palliative or end stages of the disease is just as important as providing it for patients with a curative disease diagnosis. As such, it is now recognised that nutritional support should be seen in the context of quality of life rather than just measurable outcomes (Prevost and Grach, 2012; Orrevall, 2015; Drinkwater et al., 2017). Bendixen et al. (2014) recognise that general activities of daily living such as washing, dressing, mobility and eating and drinking are fundamental issues for people living with COPD. Their research demonstrated the impact general activities had on individuals living with the disease is hugely significant, specifically because aspects such as eating and drinking are often

affected by the physiological connection of both the need to breathe and the need or desire to eat (Bendixen et al., 2014).

It is interesting that although Ferreira et al. (2012) reviewed 17 studies, only seven of them included measurements relating to quality of life. Ferreira et al. (2012) state that this was a weak part of these studies, particularly when the data was pooled for the purposes of the review; and Bool et al. (2017) did not even measure quality of life in their study of COPD patients. Quality of life for people living with COPD was mentioned by a number of participants in phase two of my research; however, like the research above, it did not form a prominent part of the discussions that took place during the interviews. In many instances throughout the interviews, the diagnostic investigatory biomedical processes dominated the discussions. Where a participant mentioned quality of life during her interview, it was connected to errors that had occurred in practice and proceeded to a comparison of care delivered between two nurses and how they were so busy, with one having more experience with the disease group than the other (p150).

Perhaps there is a lack of understanding about quality of life for the person living with COPD. Whilst a participant acknowledged quality of life in my research, the depth of the discussion was superficial. Quality of life for people living with COPD and the effects of malnutrition are recognised as having a direct impact on the lives of people with the condition (Chambaneau et al., 2016; Sehgal et al., 2017; Nguyen et al., 2019). Shalit et al. (2016) in a study of 30 participants living with stable COPD found that quality of life relating to food preparation and consumption was a significant concern for those living with the disease. The study demonstrated that people with COPD found mealtimes

stressful and were affected by tiredness, breathlessness, difficulty in swallowing and loss of weight, which some described as affecting their mental wellbeing.

Diabetes

Diabetes, Confidence and Nutrition

In contrast to COPD, the participants were confident when discussing diabetes. The majority of the participants steered the conversation with enthusiasm to diabetes and references were made to weight management, healthy eating and dieting (p142-p146). Some participants were giving patients advice about meal planning and understanding food labelling with others immediately referring to a dietitian. A number of participants used their own experiences of weight loss and dieting to support their diabetic patients. Whilst some participants were confident in relation to diabetes and nutritional care, at times, their knowledge appeared superficial and their confidence may have been related to the obvious connection between diabetes and the role of diet in the management of the disease. Beresford (2011) and Boyle et al. (2016) suggest just this, in recognising that whilst the clinical assessment of diabetes care has diet at the heart of many of the interventions required to manage the disease, GPNs often focus on other elements of care delivery. The studies suggest that with the array of clinical investigations required during a diabetes review and the limited time available to carry these out, patients often felt the investigations dominated the review and as such, found it difficult to understand some of the advice given by the GPN, or indeed discuss other aspects of their care.

Alotaibi et al. (2016) found that GPNs' knowledge and confidence of diabetes care relating to nutrition was generally poorer when measured against other aspects of

clinical interventions required at a review. They correlated the lack of knowledge to specific deficits associated with meal planning and the impact of carbohydrates on the disease process. Interestingly, the review of a number of international papers only included one from the UK and that was a study of mental health nurses, who are a subgroup within the nursing profession who have not traditionally focussed on broad elements of physical health. So although there appeared to be a greater element of confidence in the participants' knowledge in my study relating to nutrition and diabetes, it may simply be a disease related connection, which is supported by the significant threads in the published guidance. The QOF has had a nutritional indicator within the standard for diabetes for some time, giving the financial incentive for GPNs to include this in their practice. Therefore, whilst the participants in my study appeared more confident and accepting of their role in providing nutritional care for patients with diabetes than they did for those with COPD, it could be that nutrition is what smoking is to a COPD review in general practice. Smoking status and the inclusion of cessation advice was routinely given by the participants for those living with COPD, and there is a QOF indicator for such practice. Therefore, could nutritional advice be transferrable to patients living with a diagnosis of COPD, with smoking cessation being offered to those living with diabetes?

Quality Outcomes Framework

Chronic Conditions

Whilst the QOF was a significant theme that emerged during the interviews, and its impact on the care of patients with chronic conditions can not be underestimated, it is recognised that a GPN's role incorporates much more than delivering care relating to

this key target (HEE, 2017; QNI, 2016; Fanny and Berry, 2016). There was evidence within the discussions that took place through phase two of the research, of appointment times being adjusted, so that GPNs were able to offer additional care outside of the QOF framework (p128, p132-p134).

The relationship between diabetes and its obvious connection to diet could be a reason that there appeared to be a greater confidence and awareness of nutrition relating to this disease group among the participants. When pressed on nutritional care relating to COPD, a number of participants said they did not feel confident with nutritional care or indeed have the time to provide advice relating to its application to COPD (p143-p144, p151). In one interview a participant inferred she only had basic knowledge of nutrition and COPD but then conveyed some first line advice/interventions that should be offered to patients which would be regarded as good practice within current nutritional guidance (p137) (NICE, 2006). In phase one of the study many GPNs declared that they worked in autonomous roles, with 65% viewing themselves as 'advanced' in their practice in relation to managing COPD care. However, despite their perceptions of working at an advanced level, diagnosing and reviewing all aspects of COPD care, nutrition and COPD did not appear to feature as a pivotal role for the participants in general practice. This may be as a result of its lack of prominence within the QOF.

Nutritional Knowledge and Financial Drivers

It has been recognised for many years that nurses' nutritional knowledge in relation to malnutrition and obesity is far poorer and less of a priority than other aspects of nursing practice (Perry, 1997; Kowanko et al., 2001; Hankey et al., 2004). Public Health England

has reviewed the role professionals play alongside the evidence and worked with nurses and midwives to formulate a strategy for engagement. It is clear that professions such as nursing have a fundamental role to play in contributing to improving the health of individuals, families and populations (PHE, 2013a). Nutrition and weight management are cited (PHE, 2013b) throughout its priorities, particularly the contribution GPNs can play in improving the lives of those with nutritional issues. However, despite this vision for improving public health, Murphy et al. (2018) suggest the focus has simply been on obesity and weight management with little support for malnutrition in primary care. One of the principle reasons suggested for this is the funding mechanisms that have not rewarded general practice for providing care and treatment for malnutrition. The participants supported this view in phase two of the study, by clearly indicating there was no quality indicator for nutrition relating to COPD and that every indicator that currently exists and was achieved by the practice, counted towards income for the practice (p137-p138, p142, p145-p147, p150).

In figures released by the Malnutrition Task Force (Wilson, 2013) it was estimated that 93% of malnutrition existed in the community. It was often undiagnosed and where identification of the problem occurred in just 30% of cases, all patients remained malnourished for a further six months after diagnosis (Wilson, 2013). So it is unsurprising that there is a lack of engagement in this area of practice from GPs or GPNs who work within the widely cited pay-per-performance system (NHS Employers, 2016).

The pay-per-performance system was a prominent feature discussed by the participants throughout the interviews. As discussed earlier, they overwhelmingly recognised the absence of a nutritional indicator/point for people living with COPD within the QOF (NHS

Employers, 2016). It became apparent within the discussions that the QOF was a significant part of general practice and in particular drove the work undertaken by the participants interviewed for this study. The QOF (2016) was originally developed in 2004 as part of the general medical services contract for GP practices. It provided a number of quality indicators associated with 10 disease groups, including diabetes, COPD and asthma. The quality indicators are aligned to key elements of good practice standards, which were developed for chronic conditions against the backdrop of the QOF (Roland and Guthrie, 2016). The QOF was launched before its alignment to the GP contract, but very quickly became embedded within general practice as it rewarded those practices that delivered against the quality standards (Roland and Guthrie, 2016). The financial rewards for meeting the standards soon became as important as raising quality for the patient and practice, and they were a key source of income for GPs (Gillam et al., 2012).

A Crude Measure of Quality

A participant within the study recognised the value of the QOF in supporting improvements in practice, in terms of standardising care, which she believed was beneficial for both nurses and patients (p132). However, in comparing this view to the results of phase one of the study, there was a diverse range of practice across Greater Manchester (Chapter, 4). Many of the participants were not as positive about the impact of the QOF to raise standards and quality for patients; some believed it left gaps in practice and was very labour intensive in terms of the time it took them to submit all the data. Participants raised concerns about the volume of data inputting required during a review and described this as reward points, which attracted financial income for the practice (p130-p131). A number of participants believed the COPD review and

what they had to record was simply about income generation rather than being able to have time to listen to the patients to see if they could offer any other support to them.

The aim of the QOF was to provide an opportunity to execute quality outcomes within clinical practice against the context of reducing health inequalities across and within the regions of England. Doran et al. (2007) certainly believe there is the potential to improve quality of care, standardise patient outcomes and therefore reduce health inequalities through such schemes. Alshamsan et al. (2010) recognise there have been modest improvements in some aspects of the QOF outcomes for some groups of patients, which surely has to be a positive for the patient. However, they also believe there are still sub-groups of patients within disease groups who have failed to see improvements in their disease trajectory. In addition, Alshamsan et al. (2010) identify that whilst the QOF captured some quality indicators, it failed to capture other important aspects of patient care, which was exactly the point some of the participants made within the findings of my study (p130-p131, p133-p134). It was evident there was a pattern of data collection for the quality indicators, with exacerbating time pressures, which some of the participants felt left gaps in the process of what was delivered to patients.

Norman et al. (2016) believe that the concept of introducing monetary value against specific biomedical interventions within the QOF resulted in patients becoming commodities rather than individuals requiring care within general practice. The notion of a commodity could certainly be aligned to the data captured in phase two of the study. Participants suggested that if the practice was down on QOF points towards the end of the financial year, the practice would send multiple letters out to patients who

had not attended their appointments; and in some cases follow this up with phone calls to try and boost their overall point submission (p131-p132).

It was evident that the financial incentives for some practices within the study were critical to their overall income, sustainability and success. Many participants suggested they spent a lot of time trying to get patients in for their review prior to the submission of the QOF data. Roland and Guthrie (2016) acknowledge the risk that pay-for-performance schemes such as the QOF can have in practice and recognise the possibilities associated with potential misreporting of activity to secure such income. Millett (2016) acknowledges this in recognition of the National COPD Audit Programme (2016), where it was clear that practices were in some cases misdiagnosing; over reporting; and, on occasions, providing clinically ineffective treatments. It was recognised within the audit that the highly inflated QOF scores had the potential to mislead and offer an inaccurate position of the current state of COPD provision in some areas of general practice.

The Pressure of Key Targets

The participants in my study were under immense pressure to ensure they met the QOF outcomes with a number suggesting that as long as they carried out QOF activity and stayed out of the way, they would be left alone. Forbes et al. (2017) recognises it can be a barrier to person centred, holistic care because none of the quality indicators for long-term conditions require the practice to demonstrate the delivery of person centred, holistic care. As Griffiths (2010) recognises, it is difficult to determine if the quality of care provided by GPNs has increased as a result of the QOF because the measurements

are such a crude tool, determining disease effect outcomes rather than presenting a holistic picture of practice.

Phase two of the study demonstrated that some of the participants felt that the QOF influenced their practice, and in a number of cases restricted what they could and could not provide for patients at a COPD review. One participant suggested she did not have time to look at her patient because she was too busy typing the information required for the QOF into the computer. Therefore, it appeared that the QOF, in particular the financial driver behind this initiative was directly influencing and in some cases compromising the care that could be delivered by GPNs at a QOF review, and that may explain why some patients were asked to book another appointment.

A Trade off

The Code (NMC, 2015) sets down standards that nurses and midwives should subscribe to as registrants. The overarching pillars for practice within the Code are prioritising people, practising effectively, preserving safety and promoting professionalism and trust. Therefore, even without a registrant fully understanding the context beneath the four pillars of professional practice, it appears that the NMC wanted to frame the Code around what essentially puts the patient at the heart of the principles of guiding practice. However, Snelling (2017) is critical of the revised Code, which was published in 2015, suggesting that the NMC have attempted to oversimplify care with a list of statements. Snelling (2017) infers that principles of codes and ethics that guide professional practice should recognise the complex and detailed nature in which nurses practice. However, simplifying the Code does provide clarity. Some of the participants

felt that the QOF was at odds with person centred care and in essence did not support adherence to the principles of the Code (p129-p130, p134, p136). Weiss et al. (2009) recognise the difficulty in introducing an economic model within health, suggesting that the ecology of good nursing practice can be significantly affected by the commodification and productivity of the service.

However, despite the changes in healthcare provision and policy, the NMC's principle function as a regulator is to protect the patient and public safety, and in doing so the Code serves as a useful tool in which nurses and midwives can ultimately have their practice standards judged. Interestingly, a study by Tadd et al. (2006) of European nurses views relating to codes of practice demonstrated there was a significant lack of insight relating to the content of such codes. Many nurses believed that the codes were unworkable and felt that the barriers to implementing the essence of the codes were largely down to organisational cultures that dictated practice and therefore they did not engage with them.

However, regardless of such codes, nurses do have a moral duty to provide the best possible care to patients, alleviate suffering and work in partnership to do the best for them (Peter et al., 2018). Nurses have described their moral duty in terms of caring, valuing, courage, advocating, partnership and skilled, and believe that their main responsibility is to the patient (Fagermoen, 1997; Smith and Godfrey, 2002; Björkström et al., 2006; De Araujo Sartorio and Pavone Zoboli, 2010; Catlett and Loven, 2011). However, despite this, Fida et al. (2016) suggest that nurses experience 'moral disengagement' from their role as caregivers, citing confounding factors that support them to rationalise the inability to work within their code of practice. Tadd et al. (2006)

and Fida et al. (2016) both believe that the challenges healthcare faces globally in delivering cost effective treatments, with constant rationalisation and the need for efficient and high quality care for the lowest cost, has resulted in the nursing profession being starved of its moral compass. Perhaps this explains some of the feelings the participants in my study were expressing relating to the financial drivers influencing their practice.

The need for efficient and high quality care for the lowest cost is particularly pertinent to general practice. This has been evident over the years in the negotiation, renegotiation and implementation of GP contracts (DoH, 1990, 2004) at the same time as the complex reorganisation of community services, appointment of primary care trusts and subsequent establishment of CCGs. All of these factors influence those on the front line and result in competing agendas with the patients at the centre of these changes. The drive to push efficiency and cost reduction is now impacting on secondary care with the appointment of sustainability and transformation teams, who aim to redesign services and move more care into the community. Whilst this could be seen as patient focussed, it is also viewed as cost driven. All of this impacts on nursing as a whole and as Rafferty (2018) points out, compromises the qualities and standards nurses abide by, as many feel within the profession that their voice is not heard. Fida et al. (2016) believe that nurses are challenged with navigating this change whilst remaining true to their values and attempting to avoid the notion of moral disengagement.

Task Orientated Care

Influence in Practice

Many of the participants in my study felt they had limited control in the design and delivery of care for patients, despite declaring they predominately worked at an advanced or intermediate level (p130-p134, p150). The definition of advanced or intermediate practice was presented by Upton et al. (2007) in a study of respiratory nurses in primary care and utilised in phase one of my study to assist participants to align themselves against a model of respiratory practice. As discussed earlier, the QOF played a significant role in the daily practice undertaken by the participants, and the need to meet the outcomes/points was clearly non-negotiable for general practices. It could be seen that initiatives such as the QOF fuel and drive the task orientated culture for nursing and restricts the autonomous and experienced practitioner in thinking differently about the delivery of care for a specific disease group. Whilst it is recognised that autonomy and performing tasks are not mutually exclusive or interdependent, as Rafferty (2018) points out, the desire for nurses to lead, direct, design and innovate practice is being quashed by the burden of policy and directives placed upon them.

So why do nurses not stand up, be counted and resist the QOF's attempts to mould their practice, and subsequently affect the values that underpin their moral responsibilities? All of the participants in my study were employed and managed by general practitioners. Many of them acknowledged that providing they carried out the work as directed by their practices, which was largely driven by income generation, they would be left alone. However, Rafferty (2018) and Maier and Aiken (2016) recognise that nurses across the globe are strategically leading and developing healthcare policy as well as delivering

evidence based care. However, it is recognised (Rafferty, 2018) that the UK has held a historic view of nurses whereby they should be predominately female with gendered stereotypical qualities, such as being over emotional and largely positioned at the bedside. Rafferty (2018) believes this has affected the ability of some within the profession to see themselves positioned as not only highly clinically trained, but also to have the confidence to critically challenge and review practice, and to engage in the strategic design of services delivered at a local, regional and national level.

A Biomedical Model of Care

All of the participants in my study carried out clinical assessments during COPD reviews, which consisted of a long list of medical investigatory and in some cases invasive procedures (Chapter, 4 p115-p116). These included an array of blood tests, spirometry, oxygen saturations, FEV1 and MRC scores, all carried out in a time limited slot determined by the practice manager, GP or, in rare cases, the nurses themselves. As QNI (2016) and Fanning and Berry (2016) recognise, GPNs are managed and supported very differently depending on where they work. They further suggest that in most cases nurses are reporting to GPs or practice managers who are not always in the best position to manage and understand the nursing role. The list of clinical investigations the participants carried out originated from the QOF, and, as previously mentioned, were not only seen as quality standards by some of the participants but also viewed as income generation targets for the surgeries. In describing this concept, a number of participants suggested a lack of knowledge on the part of the GP and consequently conflict when caring for those living with COPD, which conveyed a lack of mutual respect for each other's experience, knowledge and role (Niezen and Mathijssen, 2014).

Task oriented care has long been cited as an outdated and a professionally damaging concept to the reputation of nursing. There was much written in the 1970s and 1980s about some of the traditional practices of nursing which were questioned and often found to be archaic and unacceptable, such as putting patients to bed at set times, toileting rounds, sternal rubs or using pencils against fingernails to assess consciousness (Lelean, 1973; Wells, 1980; Ingham, 1994). Miller (1985) particularly recognised the disparity between nurse theorists who were attempting to challenge the notion of 'task nursing' and those at the coal face who were delivering such care. She went on to suggest that the ritualistic nature of nursing was potentially damaging to patient care and reinforced the view that it was holding that profession back from developing. Miller (1985) believed that the nature of tasks and routines in nursing often resulted in procedures taking priority over the emerging concept of patient centred care.

Professional Identity

Nursing continued to fight for its professional identity and the profession moved to a widespread university based nurse education programme in the 1990s with an aim of attempting to demonstrate that underpinning evidence should be at the heart of nursing practice for the future. This is when the concept of individualised, patient centred and holistic nursing care became common within nursing curricula, and as Jasper (1996) points out there was a desire to challenge some outdated and ritualistic practices by empowering nurses to think differently. Rafferty (2018) recognises that whilst the UK had moved the training of nurses to graduate level, there are many who have frowned and undermined the move to a graduate workforce. It was principally designed to

enhance clinical practice through the development of knowledge based education and theoretical underpinnings that support students to reflect upon practice and help them to not only deliver care, but lead, innovate, design and challenge practice.

Despite the desire in some quarters to move away from the task orientated culture of nursing, it continues to be present in today's nursing and healthcare culture. One example of this is the widespread implementation of intentional rounding, which was adopted in the UK from the USA. The tick box exercise is firmly embedded within the culture of a 'task orientated nursing approach' to care. Hourly rounds undertaking common elements of nursing care for patients and ticking them off when they have supposedly been delivered is now widespread practice across the NHS. Whilst it is recognised that intentional rounding provides patients with contact to healthcare staff at regular intervals, it is the quality of that contact that is questionable and its reliance on a culture of management to drive its success (Bradshaw, 2016).

Controlling Care

The concept of intentional rounding is a similar notion to that described by my participants in their accounts of the QOF, in that many believed it was a tick box exercise, but it demonstrated compliance, quality and reward (p130-p134, p138). The Mid Staffordshire enquiry (Francis, 2013), which highlighted poor nursing practice as a contributory factor in the deaths of a number of patients, may have contributed to the notion of a top down, blanket approach in attempting to define what care looks like and how it should be delivered to the public by nurses. Critics may suggest this approach to care has elements of the concept of 'McDonaldization'. The theory, which was

extrapolated from the global giant and created by George Ritzer, builds on the ethos of the McDonalds Corporation. McDonalds has been delivering efficiency, productivity, uniformity and credibility throughout the world for many years. It begins with the concept of taking a task and breaking it down into multiple parts, to find the most efficient way of completing each part (Ritzer, 2015). Ritzer (2015) believes there are four main dimensions to McDonaldization:

- **Efficiency** – Optimum method of completing a task – individuality is not permitted
- **Calculability** – Quantifiable outcomes; quantity over quality
- **Predictability** – uniformity, standardised outcomes
- **Control** – Restricting divergence, creativity and thought over the process

The process can be transferred to multiple settings, adopted by multiple operators who essentially replicate the process; this has been utilised by healthcare providers in their drive to improve efficiency. In terms of explaining its application to the QOF, the idea would ensure that tasks contained within the framework are the same wherever they are carried out, and by individuals that do not necessarily need to think critically about what they are doing. The theory could be seen to work well in general practice, in the strict nature of the pay-per-performance structure that is the overall driver of financial reward attached to each part of the patient's review. However, whilst the concept of uniformity and consistent replication sounds positive, it has the potential of introducing the possibility of unintended consequences. Ritzer (2015) points out anything that is an unexpected consequence of such an approach is often poorly managed because an individual or organisation is not confident in the divergence away from the culture of task orientated practice. In some respects, this was demonstrated by some of the

participants within the research in the way they referred on problems associated with other aspects of patient care for COPD. It appeared that they did not necessarily feel confident about the transferability of knowledge from one condition to another, such as diabetes and nutrition to COPD, if it was not contained within the framework of the QOF criteria or their existing knowledge and experience (p133, p137, p139-p141, p143, p148, p151).

Bradshaw (2016) recognises the utilisation of the McDonalds concept within NHS policy, which can be seen within the framework and policy of the 6Cs (NHS England, 2012). This policy was developed on the back of various high profile scandals such as the one previously mentioned at Mid Staffordshire, where variability in practice resulted in poor care and subsequent litigation. The 6Cs policy aspires to improve the quality of care delivered to patients. However, I suggest it inadvertently restricts the concept and meaning of caring when individuals are told they must demonstrate six words in their practice, but fails to give meaning and depth to the importance of them. The policy risks becoming an outcomes based model of carrying out a task rather than an innate quality an individual should possess. As Baillie (2017) and Bradshaw (2016) recognise, the 6Cs were published with no underpinning evidence. It is therefore unfortunate that the Chief Nursing Officer for England (NHS England, 2012) published such a policy and that it has largely been adopted by healthcare providers with superficial meaning.

It appears the 6Cs had elements of the work of Roach's model of caring (Roach, 1984, 1992): compassion, competence, confidence, conscience, commitment and comportment. Roach's model was firmly embedded within the philosophical assumption that we care because we are human not because of the professional role

we take in society. As Baillie (2017) points out, nurses should not interpret the 6Cs in isolation, but should embed them within their moral code and utilise the theoretical and underpinning ethical frameworks to support their practice. I therefore suggest that the concept of attempting to control practice in such a crude way as the QOF has in the care of people living with COPD has the potential to miss the holistic view of individuals cared for by such frameworks.

With the Mid Staffordshire enquiry and referrals to the NMC fitness to practise panels at an all-time high, the government had no choice but to respond with some sort of policy that attempted to allay public concerns and put the patient back at the centre of care delivered by nurses. The 6Cs policy not only intended to influence current nursing practice but also attempted to capture the array of qualities that many believe are associated with nursing. This was seen in the assessment of such qualities at the recruitment and interview stages for nursing. The policy and its implementation may suggest people learn the task of caring rather than having an innate quality of caring within. However, as discussed, Macintyre (1999) and Roche (1992) believe caring is connected to an understanding of the vulnerability of individuals as well as oneself and a belief in caring regardless of title, role or script.

The standardised model of intentional rounding, the 6Cs and the QOF all have elements of McDonaldization embedded within them. They all attempt to measure outcome based caring, which undermines the concept of care itself and risks simplifying the concept of human kindness and its relationship with care. Its application to the QOF was visible where the participants in my study did not feel they had the time to talk to patients about other aspects of care, or indeed have the ability to integrate aspects of

nutrition in the strict criteria for assessment (p132-p135). Some would suggest this type of approach is seen to dehumanise caring and promote a culture of uniformity, standardisation and commodification of care as described by Bradshaw (2006). However, others would recognise the impact the adoption of the GP contract issued in 1990 and updated in 2004 had on practice. It gave greater control to GPs over the commissioning of primary and secondary care services and began the gradual move of chronic disease management from secondary to primary care (Fanning and Berry, 2016).

An Opportunity for GPNs

The numbers of people being cared for with COPD within general practice in my study were in some cases significant; a number of practices indicated over 21% of their overall practice population were living with the disease (p110-p111). This may explain why GPs have needed to increase the numbers of GPNs to support them in executing this work and ultimately meeting the new contractual arrangements and standards of the QOF. Historically, GPs, through the opportunity to income generate on the back of the contract, had in some cases employed what they viewed as ‘treatment room nurses’, which reinforced the culture of nursing as a task orientated profession (Atkin and Lunt, 1996) and perhaps this legacy remains within the culture of general practice. The number of whole-time equivalent GPNs employed following the contract increased by 37% between 1999 and 2006 to 14,616 in an attempt to meet this challenge (Goodwin et al., 2011). The rapid growth in practice nursing numbers might have exacerbated the concept of a task orientated approach to care on the back of the pay-per-performance system.

Ohlen and Segesten (1998) have suggested that some are happy with a task orientated approach to care; those who will follow guidelines, policies and procedures that may not always capture the individual care patients require, such as nutrition in those living with COPD. However, there are those that would aspire to become leaders in nursing, critical thinkers and challengers to the task orientated culture (Ohlen and Segesten, 1998) and may be able to balance the policy and guidance with a full view of patient care. My research demonstrates the concept of working in a culture with a task orientated biomedical approach to caring for those living with COPD. The desire and vision for the profession to move forward in its own right has been written in policy for a number of years in an attempt to create a culture of opportunity for nursing and shape the profession for the future (NHS England, 2016b). For example, nurses and midwives are encouraged to engage in research to continually challenge, redesign and lead improvements in service provision.

There is an aim of developing critical thinkers and giving practitioners the tools to reflect on their practice (Crozier et al., 2012). However, although there was some evidence of this within phase two of study, the participants were very clear about their role and status within the general practice team. The vision for general practice nursing is to recruit and retain the nursing workforce (NHS England, 2016a). There is recognition of the challenges of underdevelopment and lack of career progression for GPNs, which some may argue has been as a result of locally defined terms and conditions by GPs who have struggled to see the profession developing because of the constraints of varying factors affecting the delivery of the increased workload seen in recent years.

It was evident that the notion of task orientated care carried out by the participants in my study for their practices was a prominent feature within my research. The participants demonstrated this within both phases of the research by the amount of time they spent undertaking diagnostic procedures with their patients. Whilst one could suggest there was nothing wrong with physiologically assessing a patient's health condition, it is acknowledged that the QOF omits to include many other aspects of a holistic patient review and as such, defined and controlled the participants' practice. This was principally driven, as described by the participants in their general practice policies, in a need to meet the national QOF outcomes devised by a government, which ultimately demands quality, efficiency and productivity within the health sector in exchange for the terms and conditions of funding for the sector.

Inter-professional/Nurse-to-Nurse Relationships

Conflict

Throughout phase two of the study (Chapter 5, p124) there appeared to be a number of participants who viewed their relationship with their GPs and colleagues in a negative light (p147-p148, p150). One participant suggested her GP did not actually know what she did within her role as a GPN and she criticised the GP and practice as being out of date (p150). There were references made to a GP prescribing their preferred inhalers for a patient, which were not within best practice guidelines. She suggested that one of the senior GPs was a "dinosaur" and believed that as long as she brought the money in through the QOF, she would be left alone to practise as she wished.

Rosemann et al. (2006) and Jaruseviciene et al. (2013) found that despite GPs wanting nurses to work within general practice and take on extended roles, there was still an element of territorialism over certain aspects of practice and in particular the skills that they wanted nurses to undertake. Some GPs felt that nurses should concentrate on their own jobs, whatever these may be, before thinking about taking on what they viewed as medical roles (Jaruseviciene, 2013). A participant recognised that some of the junior GPs were receptive to her views, which she put down to their modern training; however, she labelled the senior partner as being out of date (p147). The difficulty this presented was the senior partner was the most influential in the practice. Le et al. (2016); Chauvel et al. (2013) Price et al. (2014); and Doroodchi et al. (2008) recognise that mature GPs who are experienced, tend not to seek new or updated information from colleagues, guidelines or medical websites; instead they rely upon dated information and their experience, which puts them at risk of not updating their practice.

Rosemann et al. (2006) and Jaruseviciene et al. (2013) further suggest that communication between GPs and nurses lacks interdisciplinary understanding. This often results in the feeling of protectionism particularly on the part of the GP and in some cases a loss of identity for the nurse. The negative perception that a number of participants had about their GPs was evident within phase two of the study where they would primarily describe their relationship with the GPs in relation to income generation (Chapter 5, p124). Perhaps the criticism of some of the GPs' dated practice and tension between the roles, in terms of nurses having to do what was classed as 'nursing' work and keep out of the way, was a result of isolation in practice. Throughout both phases of my study, participants largely worked independently in practice, and when visiting the surgeries, it was evident there were clear boundaries where GPs and nurses worked,

often not situated near to one another. In essence this could continue to fuel that lack of understanding between both parties and restrict clinical development, supervision, understanding and updating in practice. The tension felt by one of the participants in phase two of the study, was further exacerbated when discussing the concept of team working. The participant belittled the concept of a team meeting by calling it a 'sort of meeting' in which she believed she had little to contribute, despite being a nurse practitioner and holding a specialist practitioner qualification, which she viewed as giving her credibility within the context of the practice team.

The issue of conflict and role definition between medical and nursing staff is not a new concept and has been alluded to earlier in relation to task orientated nursing. However, with a specific spotlight on general practice, McInnes et al. (2015) concurs with this view that there have been particular issues associated with a lack of understanding between the nurse and the doctor about each other's roles and responsibilities. It somewhat surprised me that there appears to be a lack of understanding between roles and responsibilities of GPs and nurses, particularly because of the growth in numbers of GPNs employed following the implementation of the GP contract in the 1990s. I assumed because GPs employed nurses in large numbers following their national agreement, they would embrace the extended role of the nurse and overwhelmingly support its development to advance the subset within the profession.

Professional Hierarchical Control

However, as discussed earlier, it appears there is recognition of the need to develop nursing practice to meet the demands of government general practice policy, which

requires nurses to take on some of the work traditionally undertaken by doctors. The dated view of Atkin and Lunt (1996) could still be held in clinical practice, where GPs agree what the GPN can do within general practice and regulate this by the power they hold over the nurses' contractual arrangements. The QNI (2016) has found evidence of this, where its members must renegotiate their contracts on a regular basis, therefore providing little job security and the GP holding power over the nurses' practice and performance.

Another explanation for the lack of understanding between the two professions could be the significant rise in workload that GPs have seen in recent years. Thompson and Walter (2016) report a 12% increase in GP consultations compared to just 0.9% for practice nursing. This rise has put significant pressure on GPs with a reported 100% increase in telephone consultations; as a result this has caused increases in stress, tension and burnout among the medical profession (Thompson and Walter, 2016). So, surely having nurses supporting and advancing clinical practice would alleviate and share some of the increased workload? Baird et al. (2016) recognise the need for general practice to work differently if it is going to meet the healthcare demands of the future; however, it also recognises the significant shortage of medical staff, with problems of recruitment and retention in the profession. The report further suggests that nurses could help to plug this shortfall and take on a much greater role along with other disciplines within general practice (Baird et al., 2016).

Pressure on General Practice

Sinksy et al. (2013) found that the increasing demand on surgeries and the inability to meet targets has had a direct impact on the working environment for all involved in general practice and perhaps this explains why some of the participants in my study felt they did not have time to consider nutritional care for people living with COPD (p132-p135). The majority of participants autonomously cared for patients living with the disease, but also described their role in the context of other conditions and procedures. There was a common theme of a lack of time to spend exploring aspects of care other than key areas that provided general practice with income. Some GPs are negative towards handing over certain aspects of practice or extending the role of the GPN with what some see as an erosion of the pivotal role of a GP. This is particularly pertinent when it is seen against the backdrop of a recruitment and retention crisis for the medical profession rather than a truly transparent quality improvement programme for the service and the nursing profession (Baird et al., 2016).

Charles-Jones et al. (2003) believe that the implementation of the contract in the 1990s could result in GPs moving into a consultant role in primary care, only seeing the most complex patients. Charles-Jones et al. (2003) reported at the time that the policy of extending primary care provision required nurses to step up and advance their practice to take on the role of seeing everyday patients in an autonomous and independent manner. Whilst this view is certainly evident in current policy (Baird, 2016; NHS England, 2016a; 2016b; HEE, 2017), there appears to be a disconnect between the political vision and the practical implementation of the policies. The disparity between the growth of GP and GPN consultations (Sinksy et al., 2013) would certainly support this, as there has not been the shift required to fulfil the vision. This may go some way to explaining why

some of the participants felt they had little say over their working conditions and why GPs are struggling with workload.

Others would argue that there has been a shift in responsibility, with GPs moving further up the hierarchical ladder and becoming involved in strategic management strategies: working much more closely with CCGs, becoming involved in commissioning services and planning care for their patients (McInnes et al., 2015). This should have placed a greater reliance on the GPN workforce to deliver initial and ongoing care; however, perhaps the GPs have not shared that role and this is what could be creating a greater division between the two disciplines. Nurses clearly have a valuable contribution to make in general practice, and as Laurant et al. (2018) recognise in their study of nurses as substitutes for doctors in primary care, nurses provide equal if not better care and outcomes for patients with chronic conditions, with improved attendance and satisfaction from patients. Therefore, there is a critical role for nurses to play within general practice when caring for those with chronic long-term conditions.

As a result, this may explain why 93% of the participants from phase one of the study declared they managed COPD diagnosis, assessment and follow-up reviews on a regular basis (p114). Over half of the sample (65%) viewed themselves as working at an advanced level in relation to COPD care, which was principally defined as working autonomously in both diagnosis and follow-up care for COPD patients (p113). It was evident throughout the interviews that GPNs were not only caring for COPD patients but also leading chronic disease management in relation to many other aspects of care across Greater Manchester. However, what was not clear within the results of my research was how the perceived level of advanced practice differed from those that

declared they worked at a basic or intermediate level. The similarities in practices associated with participants working at advanced, intermediate and basic levels of care were difficult to distinguish for COPD in both phases of the study.

Knowledge and Experience

The concept of advanced practice and experience generated conflict for nurses who worked alongside other nurses. A number of participants negatively viewed their nursing colleagues as lacking knowledge in COPD care, and criticised them for being willing to take on tasks without proper training (p150). Some also suggested they revisited patient care following a review by their colleague, because they doubted their management (p150). Another participant criticised her colleague for undertaking the prescribing course, referring to her as a junior nurse and saying she herself would not prescribe without receiving more money from the practice (p149). It could be argued that the system the participants work within, which in essence financially rewards practices (NHS Employers, 2016) for undertaking certain tasks, has rationalised her view and created negativity towards her colleague and her own advancing role. The same participant, who was responsible for supporting the junior nurse's preceptorship into general practice, believed her colleague was an over anxious nurse and related the prescribing and the nature of the nurse's personality to possible errors occurring in practice (p149).

Defining advanced practice is difficult and one the regulator and professional body that sets standards for nurses and midwives in the UK has not managed to achieve. Whilst it is accepted that a specialist practitioner role is set within regulatory and recordable

standards for general practice nursing, it is not so clear cut for other titles. To achieve the recordable and recognised qualification for a specialist practitioner in general practice nursing, nurses must be able to practise the following:

1. Assess, plan, provide and evaluate specialist clinical nursing care to meet the care needs of individuals and groups in the practice population;
2. Assess, diagnose and treat specific diseases in accordance with agreed medical/nursing protocols;
3. Provide direct access to specialist nursing care for undifferentiated patients within the practice population and
4. Undertake diagnostic, health screening, health surveillance and therapeutic techniques applied to individuals and groups within the practice population.
5. Develop a profile of the practice population in order to initiate and contribute to strategies designed to promote and improve health and prevent disease in individuals and groups;
6. Initiate and carry out programmes of health screening and
7. Manage programmes of care for patients with chronic diseases.

(NMC, 2015)

With just over 25% of the participants from phase one of the study declaring they held a specialist practitioner qualification, nearly three-quarters did not but were still carrying out many of the standards set down by the NMC (p120). So have nurses taken on these roles within general practice without academic, practical and professional recognition in the form of a qualification, resulting in varying working conditions, disparity in contracts and tension towards their GPs as their primary employers? Perhaps it is this lack of definition of 'advanced' by the NMC that has fuelled conflict and resentment between and within professions, which may explain why some GPs are reluctant to truly recognise the advancing role of the GPN. Whilst we continue to utilise the terms 'specialist' and 'advanced' within healthcare but fail to define or relate their

meaning to a role, there is the potential for misunderstanding, lack of appreciation and mistrust in developing the workforce.

As with other parts of the UK, GPNs within Greater Manchester are generally employed by GPs themselves, unlike their counterparts who work within the NHS and have nationally agreed terms and conditions. General practice nurses generally have to negotiate their salary, working hours and development opportunities. The difficulty this presents is that there is no national standard set for nurses working in general practice and no standard set by the sector in how to manage the workforce of over 15,000 WTE nurses (NHS Digital, 2016).

The Queens Nursing Institute (2016) recognises the significant variability in working conditions across general practice and whilst I did not formally ask about contracts, it was evident that participants were working both full and part time, with some suggesting in phase two that they had to renegotiate their contract every year. It is recognised within the sector that the GP is not only viewed as a colleague, but also as the employer and manager, which automatically carries a significant degree of power and status (QNI, 2016). This is a very different approach to the employment status of the majority of nurses working within the UK.

Nurses generally qualify and work within the NHS at the start of their careers, and have agreed national contractual arrangements for their employment based on standard terms and conditions. It is recognised that nurses wishing to work in general practice have to negotiate the terms and conditions of their employment, including pay, holidays and hours, which can vary from practice to practice and region to region. The majority

of the participants in the study were in this position, and were required to negotiate with their GPs. This ultimately shifted the balance of power between the disciplines over to the GP and, as described by the participants, the contract was agreed through negotiation, which in some cases resulted in part-time or temporary work being offered. The participants conveyed the importance of generating income for the practice and a number expressed that if the practice did not generate income, they would not have jobs.

Contractual Arrangements

The QNI (2016) and Baird et al. (2016) not only recognise that many GPNs have to negotiate their own contracts, pay rises and other terms and conditions but accept this generated a level of job insecurity and anxiety for nurses. This may well explain why a number of the participants viewed the renewal of their contracts with such negativity and attached income generation to it (p131-p132, p138). However, the renegotiation of contracts and flexible working conditions may well be of benefit to some GPNs and there are opportunities within general practice for advancement of the role. Swan et al. (2015) recognise that the opportunities for GPNs to develop into advanced practitioners have evolved over time. It is acknowledged that such roles often bring greater benefit to patients when compared to those patients treated by a GP; therefore, opportunities do exist for GPNs to develop within general practice.

As the IPSOS (2016) report highlights, general practice nursing does attract nurses who specifically value the one-to-one contact with patients, diversity of the nursing role and the ability to specialise. Ball et al. (2015) recognise that nurses working in general

practice tend to be older than other nurses and typically do not hold a degree or other formal qualifications. They further suggest that they have greater flexibility with working conditions and in turn recruitment, retention and job satisfaction is higher than those within the NHS. So although some of the participants in the study suggested elements of conflict in parts of their working life, perhaps it is the balance between all these factors and those highlighted by IPSOS (2016) and Ball et al. (2015) that militate against some of these feelings and have kept the sample within my study in general practice for so long.

Education Training and Role Vulnerability

Recordable Qualifications

As discussed earlier, the QNI (2016) recognised the significant variability in working conditions across general practice and in a sample of over 3,400 nurses, only 10.6% held a specialist recordable qualification in general practice nursing. As previously discussed, my results demonstrated that 25% of participants held a specialist recordable qualification, although nearly 50% of the participants' highest qualification was awarded on registration, which were the traditional RGN and diploma awards (p120). This has significance because the amount of time participants had been qualified on average was 38 years, with the majority training pre-1990 and the time spent in general practice averaging 14 years (p120-p121). These results suggest that a large number of participants have not undertaken academic study leading to additional qualifications. This was evidenced in phase one the study, where only 30% of participants had undertaken a post qualifying course that contained some content relating to nutrition, with only 3% undertaking a specialist nutrition module (p118-p119).

Aston (2018) believes the specialist practitioner qualification in general practice is seen as important as it aims to develop the nurse's skills in critical thinking, support their ability to advance practice, review evidence and lead and challenge service provision. It is also one of the few nationally recognised standards that need to be met prior to the recording of this qualification by the Nursing and Midwifery Council (NMC, 2015). However, it was evident through my research and reviewing the national picture that there were many barriers to GPN development, primarily the differences in working conditions between practices, regions and nations of the UK. As previously mentioned, one explanation could be that some GPs do not want nurses to develop, or take on extra skills, which may improve their decision making and enhance their level of autonomy within practice. It is evident that some GPs and particularly the culture within medicine have not felt that nurses have the intelligence and ability to work without tight control and that they need direction from a medic (Wilson et al., 2002; Rosemann et al., 2006; Jaruseviciene et al., 2013; McKenna et al., 2015). It is therefore perhaps the aim of a framework such as the QOF, which is prescriptive in its design and seeks standardised care, to keep the nursing profession working under the tight control of medicine.

Restricted Practice

There was evidence of this within my research, where participants demonstrated in both phases of the study that they worked according to the tight framework of the QOF in their practice (Chapter 4 and Chapter 5). When asked if they were able explore nutrition that did not form part of this framework and think critically about other aspects of patient care, they were generally restricted by both the national standards and local

practice constraints. Whilst the development of nursing practice, and in particular general practice nursing, forms part of Health Education England's strategic vision (HEE, 2017), it could be suggested that this remains incompatible with the notion of McDonaldization.

Giving nurses the opportunity to not only work to standards such as the QOF, but also integrate personalised care, requires greater depth of knowledge, the ability to effectively draw upon information and the need to utilise previously underused decision-making skills. Ritzer (2015) suggests there is a risk to predictability and control and as a consequence, standardisation suddenly moves towards the variability continuum. Although health policy (NHS England, 2016b; HEE, 2017) on the one hand wants to develop the workforce, support the development of extended roles in practice and give greater autonomy to practitioners, it is evident that aversion to risk and the constraining nature of some policy, such as the QOF, creates a barrier to achieving this. Participants should be empowered to look more holistically and be able to practise autonomy to integrate other aspects of care into the QOF review (Regan et al., 2016). However, as Cooke (2016) describes, the healthcare system in the UK has moved rapidly to attempt to control and constrain nursing practice in a bid to reduce the risk of litigation that comes from variability in practice and subsequent assertions of poor care that some feel this brings.

It is not just the QOF that has restricted the exploration of opportunities to support COPD patients with nutrition, a lack of confidence and nutritional knowledge also appears to have been a factor. A number of studies have explored nurses' knowledge of nutritional care, principally malnutrition, and found they lacked knowledge, confidence

and the ability to adequately assess a patient's nutritional status; however, these were carried out in a hospital setting. Where assessments were carried out in the studies, there was a lack of robust action on the part of the nurse with many not viewing nutrition as important as other aspects of patient care (Perry et al., 1996; Kowanko, 1999; Bachrach-Lindström et al., 2007; Graarup et al., 2014).

Cadman and Findlay (1998) specifically explored GPNs' knowledge of nutrition because of concerns relating to this area of practice. They found low confidence among GPNs surrounding knowledge of diet and subsequent interventions needed to support patients. More recently, Murphy et al. (2018) acknowledged little research has been carried out in primary care to examine and tackle malnutrition within communities, and suggest that part of the problem is a lack of leadership within general practice, funding pressures and overburden of other clinical activity. Whilst it is recognised that leadership forms part of the standard for the specialist practice award, only 25% of the participants in Greater Manchester declared they had completed this qualification. This may well explain why participants said they did not have any more time to add anything else into a COPD review (p132-p135). Perhaps the development that specialist practice provides restricts some participants to think more broadly about the concept of redefining care.

Responsibility of Care

Along with lack of time, some participants believed that specialist knowledge was required to give nutritional advice to respiratory patients. As a result, some of the participants viewed themselves as 'generalists' that covered a broad spectrum of care with some referring on to specialist services such as dietitians for this aspect of care.

However, the Nursing and Midwifery Council (2015) Code is clear in the nurses' responsibility to support nutritional care in practice with a footnote in the standards saying,

The fundamentals of care include, but are not limited to, nutrition, hydration, bladder and bowel care, physical handling and making sure that those receiving care are kept in clean and hygienic conditions. It includes making sure that those receiving care have adequate access to nutrition and hydration, and making sure that you provide help to those who are not able to feed themselves or drink fluid unaided. (NMC, 2015)

As Snelling (2017) points out, the revised code (NMC, 2015), was a reaction to the Francis Report (2013) in response to failings at a Mid Staffordshire hospital where patients died or received poor care over a number of years. Although Francis (2013) found failings in relation to the nutritional and hydration care of patients, Snelling (2017) believes the new code was a reactional measure and, as previously discussed, one that has in some part over complicated practice by becoming too prescriptive and in turn oversimplifying the complex environment that nurses work within. It is recognised that nurse education and the standards that support practice fundamentally integrate nutrition as a key role for nurses within the curriculum when educating the nursing workforce. So what happens upon qualification when nurses, and in particular the participants within my study, do not feel it is part of their role as practising registered nurses? One participant stated that if she wanted to be a dietitian she would have trained as one; she was a nurse and focussed on nursing aspects of care (p139). Despite this, the same participant appeared to be undertaking and interpreting what some would view as medical aspects of care, traditionally undertaken by a doctor.

Perhaps the NMC (2018a) have recognised the problem and that is why they have specifically upgraded the standard within the Code, to explicitly spell out nurses'

responsibility relating to this area of practice. So do GPNs hold the medical role in higher esteem than the role prescribed by the Code? Nurses have traditionally been happy to extend their role in practice by taking on the perceived medical role of doctors, particularly with activities such as prescribing, so it is not clear why the participants would negatively view nutrition as a dietitian's sole responsibility. Kooienga (2015) and Maier et al. (2016) believe that it is doctors that are giving nurses tasks that they do not need to do, and as such nurses are being used where the knowledge and the skills of a doctor are not required. Harris et al. (2010) recognises that GPNs tend to be employed directly by the practice, whereas AHPs are often commissioned from secondary care providers. This can make team working and understanding the roles and responsibilities surrounding patient care needs difficult and disparate, which in turn creates mistrust and a lack of willingness to share practice roles (Harris et al., 2010). Perhaps it is this divide that facilitated some of the participants' negative views towards the role of a dietitian in phase two of the study (p140).

The participants' view of nutrition could clearly be in breach of the Code and the responsibility nurses' have to support the nutritional care of COPD patients. However, as Scott (2017) points out, nurses operate within a system that is based upon value judgements, which are principally driven by a regulatory code of practice. Scott (2017) recognises that many nurses are driven by their own internal values and belief systems, which in many cases cause conflict with the professional standards and risk fitness to practise. As previously discussed, there has been some confusion over the role of GPNs (McInnes et al., 2015) with some participants indicating that they were misunderstood by staff within their practice. Perhaps, in an attempt to define their own roles, responsibilities and identities as GPNs, they have inadvertently constrained their ability

to develop their knowledge surrounding nutritional care because they associate it with another discipline and wish to align themselves with medicine and the notion of doctoring.

Demonstrating Worth

Reay et al. (2017) found for nurses to develop within general practice and to take on some of the tasks from doctors they needed to convince medics of their worth, which was often achieved by persuading doctors they should primarily focus on the most complex of patients. Reay et al. (2017) found that physicians began to be more comfortable with nurses extending their roles into what was traditionally seen as a medical domain providing they worked to strict criteria, often defined by doctors themselves. So although 94% of the participants from phase one of the study declared they worked in some form of autonomous role for the COPD provision of care, perhaps the restriction was already set by the doctors themselves, both locally and nationally, in the form of guidelines and standards that nurses had to work towards, such as the QOF (p113).

It is perhaps not surprising that the majority of the participants in phase two of the study felt they lacked confidence in providing nutritional support for patients with COPD in general practice (p142, p144, p150). A number of the participants who had been on respiratory study days said that nutrition was never discussed, with some saying they had never seen a dietitian at these events (p151). The training for the participants was frequently provided by drug companies and generally covered aspects of inhaler

technique, steroids and other medical interventions for improving respiratory function. It is recognised that respiratory care surrounding COPD has largely focussed on the pathophysiology of the disease, mainly dealing with exacerbations and subsequent treatment rather than the holistic picture of the person living in a community (Simpson and Rucker, 2008; Wouters and Augustin, 2016). It is therefore not surprising the participants do not feel confident in relation to nutritional care for respiratory patients, when there is a lack of recognition by not only the QOF but also the educational updates they receive in practice that omit nutrition from the agenda.

Chapter 7 – Conclusion and Recommendations

This chapter draws the study to a close and examines the extent to which the research aim and objectives have been achieved in exploring **‘the role of the General Practice Nurse in the Nutritional Care of people living with COPD’**. The key results from the research are presented with consideration of the impact on clinical practice and how such findings can influence future practice. In using a pragmatic philosophical approach (Chapter 3) and a mixed methods concurrent design, a survey followed up with participant qualitative interviews have provided an insight into GPNs’ knowledge and attitudes in the area of nutrition and COPD.

Rationale for Undertaking the Research

The key driver for undertaking this research was that a large part of my previous clinical background as a specialist nutrition nurse was spent reviewing patients admitted to hospital with exacerbations of their condition. Discussions frequently took place regarding a patient’s deteriorating condition and often, the nutrition team attempted to explore the feasibility of providing nutritional support for the most chronically malnourished patients. The multi-professional team often reflected on the reasons why nutritional intervention could not have been offered at a much earlier stage in patients’ disease process. Based on my experiences, when I started this research I had a firm idea about what my findings might be, thinking that general practice was to blame for the lack of nutritional support offered to people living with COPD. I did not understand the complexity of general practice provision, specifically the role of the GPN in the care of those living with COPD and other chronic conditions.

The continued drive to improve the nutritional care for service users is recognised as important within the delivery of healthcare provision. NICE (2006) published national nutrition support guidelines for both primary and secondary care sectors and BAPEN have continued to push for service providers to engage in national nutritional screening weeks not only to raise awareness of malnutrition, but also to put a call of action out to professionals to address it (Russell and Elia, 2014). It is evident that the largest proportion of people living with malnutrition is in the community, with an estimated 93% of all cases originating in people outside of the hospital environment. There is a plethora of literature available to enable practitioners to refocus their efforts in providing nutritional care and there is demand to support those who have a diagnosis of COPD (NICE, 2006; Collins et al., 2012; Ferreira et al., 2012; Russell and Elia, 2014; BAPEN, 2016; Murphy et al., 2018). The Nursing and Midwifery Council have overtly supported concerns expressed regarding some key aspects of essential nursing care and have revised the Code to include nutrition and hydration as a key responsibility for the nursing profession (NMC, 2015).

Study Achievements

The study has achieved the aim and objectives set out at the start of the research.

Aim

The overall aim of this study was to explore the role of the general practice nurse in the nutritional care of people living with COPD

Objectives

In order to explore the research aim, the following objectives of the study were to:

- Evaluate the historical and contemporary literature relating to the nutritional care of people using primary and secondary health services.
- Analyse the current nutritional practice of a sample of general practice nurses caring for people living with COPD through a survey.
- Analyse the thoughts and feelings of a sample of general practice nurses about their role in providing nutritional care for people living with COPD through qualitative interviews.
- Contribute to the body of knowledge about the role of the general practice nurse in the nutritional care of people living with COPD.
- Offer suggestions about the ways in which the findings could inform the nutritional care of people living with COPD in primary care.

The review of the literature in relation to the role of the GPN in the care of people living with COPD was sparse. Therefore, a broad overview of chronic health conditions; political context of general practice; the evolution of the GPN's role; and the concept of malnutrition has been presented in order to frame the rationale for undertaking the research. The mixed methods, concurrent design enabled an exploration of the role of the GPN by utilising a questionnaire in phase one, supported by qualitative interviews in phase two of the research. The survey of GPNs (Chapter 4) has demonstrated a broad range of practice across Greater Manchester but with frequent similarities in relation to COPD care, with the greatest differences being seen in nutritional practice across the sample. Therefore, the survey provided some insight into the variability of practice across Greater Manchester, and resulted in the decision to undertake unstructured

qualitative interviews in an attempt to drill down to understand current practice for those living with COPD. Through analysis, the interviews demonstrated some key themes across the sample, and provided insight into the thoughts and feelings of GPNs relating to the nutritional care of people living with the condition; it also presented valuable data relating to their working environment and professional working relationships.

Summary of Key Research Findings

The research concluded that,

1. Nutritional care for people living with COPD is not a priority for participants in this study.
2. The QOF, although focussing on quality outcomes for people living with COPD, restricted nursing practice in relation to the holistic view of the person living with the disease.
3. There appeared to be a lack of inter-professional working and rigid role boundaries resulting in poor communication across professional groups, which translated into disjointed care and an increased risk to patient safety.
4. There was evidence of confusion regarding the benefits of providing nutritional support for people who are in the later stages of the disease.

Nutritional care for people living with COPD was not a priority for the GPN participants in this study and this is important because up to 45% of those living in the community can experience malnutrition (Collins et al., 2012). People who have COPD and are malnourished are more likely to experience impaired respiratory function, increased exacerbations, greater risk of infection and subsequent risk of hospital admission

(Collins et al., 2012, 2018). Whilst the survey results demonstrated similarities in COPD interventions, it presented differences in relation to the nutritional care for this group. There was some evidence of understanding and action surrounding the importance of dietary awareness for people living with COPD from the survey but this was not consistently reflected across the sample. In some respects the qualitative interviews were at odds with the survey results. Participants overwhelmingly believed that nutritional care was not part of their role and that it should be provided by another discipline or service, and in some cases they believed their patients did not have concerns about nutrition. Where malnutrition was identified, the GPNs in this study deemed it too late to provide support because of the late stage in the person's disease process. Many of the participants believed they did not have the confidence or time to include nutritional care in the person's review, which appeared to underpin their view that nutritional care should be provided by another discipline or service.

The QOF, which emerged as a theme from phase two of the research, drove the practice of GPNs in the care of patients living with COPD and other chronic conditions. All participants universally adhered to the framework, as this was how practices received their funding for the care of this client group. It was evident that the framework stipulated that a variety of biomedical investigations and tasks had to be carried out when caring for people living with the disease. Participants had limited time for these reviews which, combined with the biomedical approach to care, restricted a holistic view during the assessment of the person. Whilst some of the participants felt that the framework was a positive tool to ensure practice was standardised across the country, some believed it restricted their practice in not being able to look more broadly at other aspects of care. There was no indicator for nutritional care stipulated within the COPD

quality framework. This may explain why nutrition was not a priority for general practice because participants recognised the connection between the interventions they carried out for the QOF indicators and the link to income generation for the practice. However, does this not undermine the fundamental role of a nurse in providing person centred care and result in the holistic concept of care becoming lost in a financially orientated system?

There appeared to be a lack of inter-professional working and poor communication across professional groups within the study. A number of the participants referred to their general practice and in particular GPs in the context of income generation, and described how this had a negative impact on their working environment. There was some tension between nursing colleagues in the same practices regarding the nursing decisions and care of people living with COPD. When concerns regarding aspects of COPD care were highlighted, several of the participants suggested that they referred to their GPs, which often required patients making another appointment and risked no follow up or communication between the nurse and doctor.

The role of the dietitian was frequently discussed, but a number of participants suggested either it was too late to refer or that their patients had died before they were seen. Participants suggested that when the dietitian was involved in a patient's care the information that was given to the patient was inadequate. Some participants recognised that nutritional care was offered as part of pulmonary rehabilitation services and patients had access to a dietitian as part of this service; however, there was little knowledge of what information was given to patients and communication between the service and general practice appeared poor. This is important because the patient does

not appear to be receiving a joined-up service and, as identified earlier within the study, the majority of pulmonary rehabilitation services only provide care for up to six weeks before discharging patients back to their general practice. Therefore, if little is known about the services provided by this specialist service, how can continuity of care be continued?

There was an assumption among some of the participants about the benefits of providing nutritional support, particularly for those people who were in the later stages of the disease. This view was exacerbated by the use of the term 'end stage' and what this actually meant for the person and those who were treating them. The classification of the disease process is framed around four stages, with 1 being mild through to very severe, stage 4 (NICE, 2010, 2018). Nutritional care is recommended in the very severe category, suggesting that there are benefits in providing nutritional support much further into the disease trajectory. If the participants are referring to end stage in terms of stage 4 of the NICE (2010, 2018) clinical guideline, then there is misinterpretation of not only the categorisation of the disease but also the benefits of providing nutritional support for people living with COPD. Most of the literature found benefits in providing nutritional support for people who were in the later stages of the disease process (stage 3 and 4). However, these predominately used prescribed nutritional products compared to the participants in my study, who mainly recommended fortification of diet with few recommending the use of nutritional supplements (Collins et al., 2012, 2018; Grigorakos et al., 2009; Miao et al., 2005).

Participants in my study generally believed they lacked knowledge of nutritional care for patients living with COPD. This is important because nursing is continually striving for

autonomous, well-educated practitioners who are leaders, role models and, as the NMC (2018b) suggest, visionary in their thinking about clinical practice. The QOF along with GPs as gatekeepers inadvertently restricted this development. However, when exploring this area further (in phase two) it was evident the reasons for this were multifaceted. It was clear that GPNs were already delivering nutritional care and advice to people living with diabetes, which was principally supported by a requirement within the diabetes quality framework. This aspect of diabetic care was described in the context of healthier eating connected to weight loss, which some of the participants delivered to diabetic patients by sharing their own personal experiences and struggles with excessive weight. The experience of nutritional advice was limited to weight loss as opposed to weight gain as reported for patients with COPD. General practice nurses did not feel that nutrition was recognised as an important aspect of care for patients living with COPD by the wider healthcare teams; this was because the training they had received for caring for people with COPD had not previously contained any information relating to nutrition.

Comparison with Previous Research

There is a paucity of literature relating to the GPN's knowledge and attitudes towards the nutritional care of patients living with COPD. Where research exists in relation to malnutrition, it largely relates to nursing knowledge and practices of nutritional care across inpatient acute care settings. When I compared my findings to those of contemporary literature, comparisons could be made which demonstrate that nurses lack knowledge in identifying, treating and managing the nutritional care of patients, with attitudes that nutrition was someone else's responsibility because it is often prioritised as less important than other nursing duties. These findings are largely

explained by a lack of education and training in this field, which the evidence suggests is crucial in improving knowledge, attitudes and subsequent practice (Perry, 1997; Kowanko et al., 1999; Schaller and James, 2005; Boaz et al., 2013; Duerksen et al., 2014; Bauer et al., 2015). Where research does exist in general practice in the UK, it is generally dated, poorly reported and measures knowledge, attitudes and practices prior to specialist training being implemented across general practice (Cadman and Findlay, 1984).

International research found that Australian GPNs considered nutrition to be an important part of their role in chronic disease management, but felt they lacked time, resources and knowledge to adequately provide nutritional advice for their patients (Martin et al., 2013). Odencrant et al. (2007) studied the experience of nursing care for people living with COPD and nutritional deficiency in Sweden. The patients in the study had already presented with impaired nutritional status; and although undertaken in primary care, the study relied upon respiratory community nurses, rather than GPNs. The study reported that respiratory nurses primarily used intuition, normally recognising nutritional issues towards the end of the disease trajectory, because of a lack of underpinning knowledge and practical strategies in identifying those patients who may have required intervention at an earlier stage in their disease process. When comparing the results of Odencrant et al. (2007) to the national guidance for people living with COPD in the UK, the suggestion of nutritional support being provided much later in the disease process is consistent and aligned with the guidelines. Odencrant et al. (2007) also found nurses within their study were more likely to avoid referring to a dietitian for those patients who were suffering from malnutrition, yet did so for those who were obese. This is in contrast to the results within my research; participants in my study felt

more confident offering weight loss advice. Thus, research from other countries suggests that nurses are more confident in providing support for people who are living with malnutrition.

Participants within both phases of my research felt nutrition was important, and whilst there are similarities with the findings of Martin et al. (2013) and Odenchant et al. (2007), my study suggests that nutritional care for people living with COPD is not a priority for GPNs in Greater Manchester. The QOF restricts nursing practice in relation to the holistic view of the person living with COPD. A lack of inter-professional working and poor communication across professional groups was evident within general practice when caring for those living with COPD, and there was confusion regarding the benefits of providing nutritional support for people who were in the later stages of the disease process.

Contribution to the Knowledge Base

This is the first study that has explored the role of the general practice nurse in utilising the Quality Outcomes Framework in their practice to care for people living with COPD. The study aimed to explore the nutritional care and management for those living with COPD who received care through their GP. It became apparent that nurses were the primary caregivers in chronic disease management and therefore best placed to contribute in the research. Their interpretation of COPD care was framed within the context of the QOF, which was principally driven by the standards that it required in order to enable the practice to receive income for the care delivered. It was evident that GPNs had a diverse role within practice but largely compartmentalised chronic care

within the pay-per-performance system that exists in current general practice policy. It is therefore important to recognise that the QOF is not working in the right kind of way and is restricting holistic care for people who are living with COPD. The number crunching, box ticking, money/task orientated approach is not helpful for nursing, not helpful for the vision of the GPN and does not place the person with COPD at the centre of the framework.

Recommendations for Future Practice

The following recommendations are framed within the context of three areas for future development: research, practice and education. There is evidence that better communication is required between key stakeholders in the care of those living with COPD, and that the person living with the disease should be at the centre of such care. The figure below, suggests that the person with COPD, the GP, pulmonary rehabilitation service and GPN should work in seamless collaboration, moving back and forth in the assessment and ongoing treatment surrounding an individual's care (Figure 17). This will enable shared knowledge, understanding and education, not only among the professionals but with the person living with COPD.

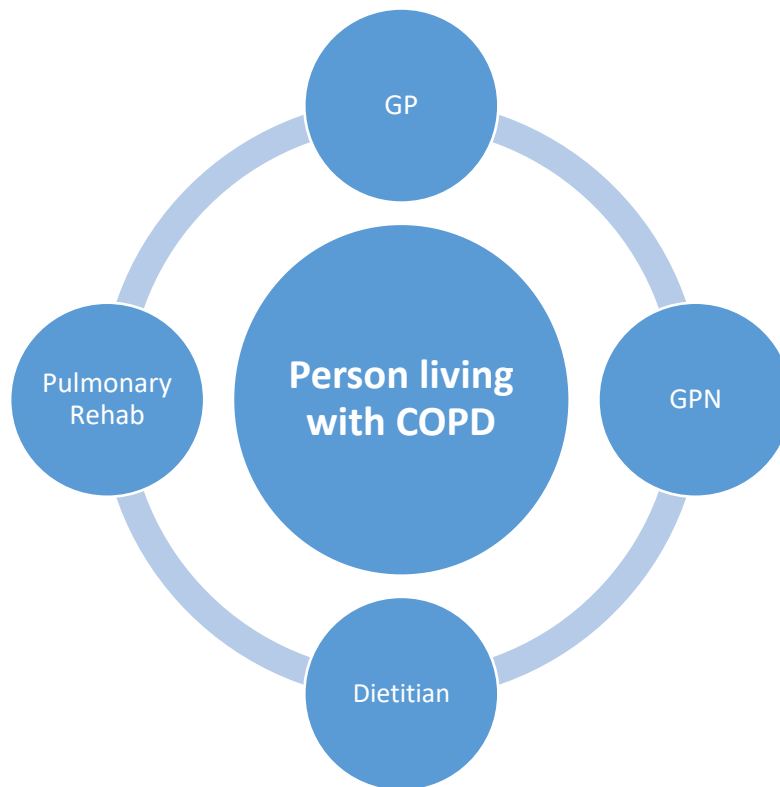


Figure 17: Key stakeholders in the care of people living with COPD

Research

The research surrounding GPNs' experiences of and attitudes to the nutritional care of people living with COPD is sparse. Whilst this study reports a contemporary view of the role that GPNs have across Greater Manchester in the nutritional care for those living with COPD, its remit was not to examine the views or practices of GPs, dietitians, pulmonary rehabilitation services, service users or carers in the provision of nutritional care for people living with COPD. Participants within my study frequently referred to the professionals and/or services when describing nutritional practice with few making reference to their patients. Therefore, the voices of these practitioners and services as well as patients and their carers could be important elements in the jigsaw to obtain a fuller picture of the patient's nutritional journey within general practice. Patient and carer research relating to concerns about weight loss in chronic disease has been widely

carried out in those who have a diagnosis of cancer (Hopkinson et al., 2006; Reid et al., 2009; Reid et al., 2010; Muir and Linklater, 2011). As a result, this has enabled service providers to acknowledge that nutritional care has an important role to play for those living with a diagnosis of this condition, and in many practice areas this is recognised as part of the overall treatment journey for this group of people. I would therefore recommend that further research for those living with a diagnosis of COPD should be considered in relation to,

1. An examination of the role of the GP, dietitian and pulmonary rehabilitation services in the inter-professional care of those living with COPD and the link with the GPN.
2. Whether nutritional support in the early stages of the COPD diagnosis offers any clinical, psychological, social or cost benefit for the patients living with the disease.

Practice

Healthcare professionals have recommended a community nutritional pathway for patients living with COPD. The pathway, written by an interdisciplinary group of healthcare professionals, including a GP, systematically sets out a process for identification and treatment of malnutrition for those living with COPD (Malnutrition Pathway, 2016). The pathway was published four years into my research and builds upon previous guidance issued by the Association of Respiratory Nurse Specialists (ARNS, 2011). With an easy to use and comprehensive traffic light pathway for identifying and providing nutritional support for this group of patients, it enables practitioners to implement various strategies when considering nutritional care as part

of COPD provision. However, it is not yet known how the updated Malnutrition Pathway (2016) will be embedded into community practice. The previous version published in 2011, and approved by the Department of Health, was not discussed during my research apart from when one of the participants found it in a filing cabinet during a visit in phase 2 of the study. This possibly suggests that the updated initiative may also be slow to make an impact on everyday practice within surgeries across Greater Manchester.

I would therefore recommend,

- The implementation of the COPD Malnutrition Pathway into COPD reviews within general practice across Greater Manchester and audit its use in the identification and treatment of malnutrition.

This intervention would require education and training of staff within the service to support the use of the pathway and to enable practitioners to integrate the concepts of treatment into the current programme of review.

Education

Lack of knowledge and subsequent confidence was a key theme that emerged from both phases of the research. It was evident that GPNs within my study did not feel they had the knowledge, confidence or time to provide nutritional care to those living with COPD. The majority of nurses within the sample had trained pre-1990 and referred to their nurse training as lacking nutritional input. Whilst this cannot be verified, nurse training pre-1990 was predominately work based and not equally delivered or assessed in the same way as it is in current graduate training. Whilst many of the participants indicated they had undertaken training and development whilst working in general practice, this was predominately in the form of updates provided by private industry and very much

on an ad-hoc basis. Where it related to COPD, It was evident that there was a lack of nutritional content within the updates, with participants suggesting that nutrition was not on the agenda nor did they have access to dietitians at these events.

I would therefore recommend that I,

1. Disseminate the results of this study across Greater Manchester general practices and clinical commissioning groups as well as to the NHS England (North) practice nurse forum.
2. Work with the Association of Respiratory Nurse Specialists to review education and training in general practice regarding the importance of nutritional care in COPD.
3. Publish the results of this research in order to add to the body of evidence and in turn influence changes in practice and policy development.

Policy Drivers

The scene is already set to be able to influence general practice provision, the role of the GPN, long-term health conditions and the nutritional care for those living with COPD. Within Greater Manchester, the 2021 Health Plan (GMCA, 2017) put GPs at the centre of health provision, outlining a central role in the delivery of care and integration of services, with ambitious plans to reduce the number of deaths as a consequence of respiratory disease. Malnutrition is recognised by the GMCA Plan (2017) as having a major impact on health, wellbeing and illness and as a consequence the authority plans to build on the work of an institution in Salford and the Malnutrition Task Force in attempting to join up services for those who are malnourished.

As discussed earlier, the Malnutrition Pathway superseded the respiratory nurse specialist's nutritional guidance, which has now become the first multi-professionally supported approach to address the nutritional needs of those living with COPD (Malnutrition Pathway, 2016). The pathway provides practice solutions to provide assessment, identification and treatment of malnutrition and has been endorsed by the Royal College of GPs; this offers a real opportunity to influence those in local practices.

The NHS Long Term Plan (NHS England, 2019) provides an opportunity to refocus efforts, particularly for those with respiratory disease and living with COPD. The ambitious plans suggest that early diagnosis will be achieved, which in turn will offer more patients the opportunity to access pulmonary rehabilitation and wellbeing services. Whilst the plan does not formally recognise malnutrition, it acknowledges nutrition training is inadequate in pre-registration programmes, and to be able to achieve many of the ambitions within the 10-year vision, professionals must be equipped with the knowledge and skills to understand the concepts of nutrition and health.

The General Practice Forward View (NHS England, 2016a) recognises that whilst the QOF has brought many benefits to the care of those with chronic diseases, it may be time to review the concept of the pay-per-performance system. NHS England has agreed to undertake a review of the QOF, to consider something more holistic in nature when caring for those living with chronic diseases. The Forward View also recognises the significant contribution GPNs play in the delivery of patient care and the disparity in their working environment, terms and conditions, and professional development. The plan aims to centrally invest in the training and development of the GPN workforce and address the culture within general practice nursing to move to continuous development.

This will be achieved by opening up more general practices to pre-registration nursing students, which in turn will embed a philosophy of development and speciality, making it a desirable place to work as a nurse.

The Forward View (NHS England, 2016a) recognised the need to develop the general practice nursing workforce and subsequently published their 10-point action plan to address this. GPNs clearly need the opportunity to be able to access education, training and development to ensure they continue to provide high quality evidence based healthcare, not least because it is a requirement of the Nursing and Midwifery Council revalidation process.

NHS England's (2017b) plan to address this need and has identified not only support for access to training and development for the GPN workforce, but also the ambition to extend educator and leadership roles, establish inductions and preceptorships for new nurses, increase nurse training placements in general practice and support for access to education. This connective vision (Figure 18) is aimed at creating a culture of recruitment, retention, learning and reflection within the field, and in turn it is hoped it will support the voice of the profession in shaping the services that are delivered within general practice.

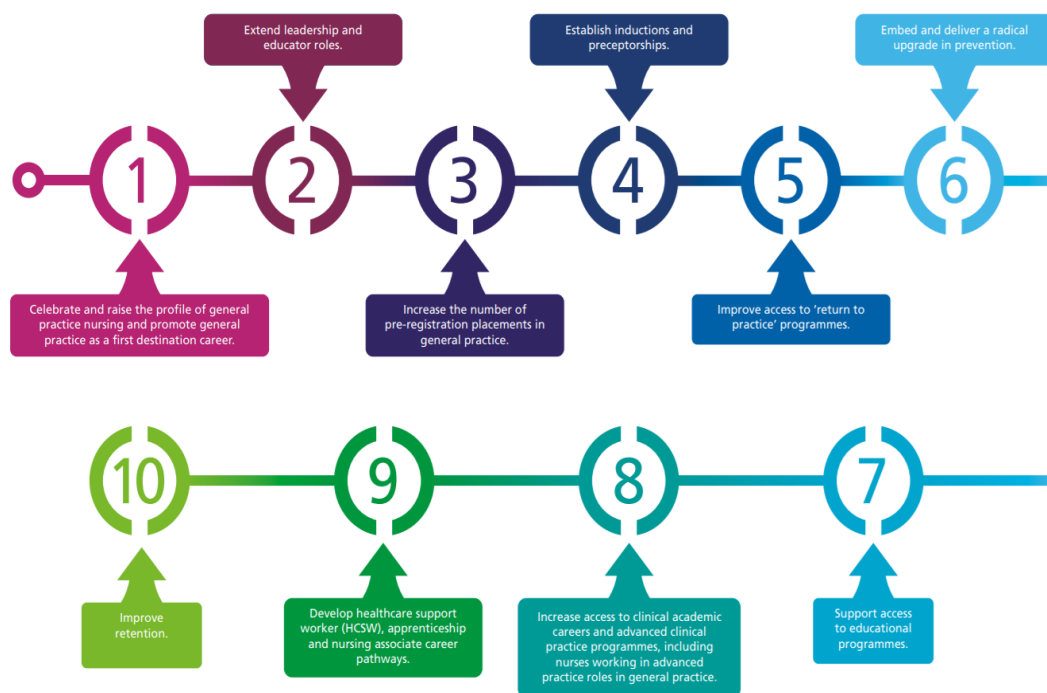


Figure 18: NHS England – 10-point action plan for general practice nursing (NHS England, 2017b)

Despite the barriers to professional development, education and training for the practice nursing workforce as recognised within my research, it is clear that there is a vision to change the culture of development within general practice (Merrick et al., 2012; HEE, 2016; NHS England, 2017b). If the GPN is going to continue to adequately manage complex chronic conditions in the community and expand and innovate their roles, which NHS England (2016, 2017b, 2019) plan in their view of general practice services, then time and resources must follow to be able to achieve the vision to transform services.

Concluding Comments

This study was conducted over seven years, during which time a variety of contemporary policy has been published including a vision for primary care services, general practice

and general practice nursing (NHS England, 2016a, 2017b, 2019). The publication of the Malnutrition Pathway for COPD in conjunction with the above policy along with the results of my research offer the greatest opportunity to not only influence the care of those living with COPD but also other chronic conditions cared for in general practice. The recommendations put forward under the umbrella of research, practice and education will take forward this work in supporting the aim and objectives set out at the beginning of this study.

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Appendix 1

Application for Ethical Approval



ACADEMIC ETHICS COMMITTEE

APPLICATION FOR ETHICAL APPROVAL
SCRUTINISER'S REPORT

NAME OF SCRUTINISER: GAYATRI NAMBIAR-GREENWOOD		EXT: 2237
Email address: g.nambiar-greenwood@mmu.ac.uk		
Name of Applicant: Neil Wilson		
Project Title: 1229 Explore the current knowledge and attitudes of practice nurses relating to nutrition and COPD and map the current practices relating to nutritional care of COPD patients and how this compares to national guidance		
1	Ethical Concerns: None of note	
2	Comments for the Principal Investigator/Co-Workers: An interesting and relevant study.	
	More information required: No	
	Conditions of approval: -Addition of information within participant information sheet: it does not mention at all, unlike the consent form, that the interview is going to be taped. -In the complaints section, there also needs to be a sentence regarding being able to contact your Director of Studies, name, e-mail, phone number and address of this person for further information (on top of the Director of RIHSC).	

	Recommendations:	
3	What action do you recommend to the Head of Academic Ethics?	
	Request more information from the applicants as outlined in Section 2	
	Grant unconditional approval and inform the applicants that the research is approved and report approval to the Academic Ethics Committee.	
	Grant approval subject to conditions and appropriate responses to your recommendations from the researcher(s) and report approval to the Academic Ethics Committee.	x
	Seek further scrutiny from a different area of expertise.	
	Do not approve and refer the application to the Academic Ethics committee.	
4	Issues to be resolved by the Academic Ethics Committee:	

Appendix 2

Participant Information Sheet

Version 2 06 June 2014



Information sheet to accompany Consent Form

Study Title:

An exploration of the current knowledge and attitudes of General Practice Nurses in relation to the nutritional needs of patients with COPD

Name of Researcher: Neil Wilson

Please read the following before completing the consent form.

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you.

What is the Purpose of the Study?

The purpose of this study is to explore the nutritional care of COPD patients in general practice.

The specific aims of the study are as follows:

1. What are the views of Practice Nurses relating to the nutritional care of patients with COPD
2. What strategies do Practice Nurses consider will support or enhance their practice in relation to the nutrition care of COPD patients

If you decide to take part in the study

Within the next year you will be invited to participate in one semi structured interview. The interview will last up to one hour and with your permission will be audio recorded. This will be arranged at mutually convenient time.

The interview will involve only yourself and the researcher. The researcher will have a set of topic areas to guide the discussion. However this will act as a prompt only. You will be free to discuss areas related to the subject which you may feel are important.

Why you have been invited?

The researcher recognises your work with patients who are diagnosed and are living with COPD.

Do you have to take part?

It is up to you to decide. If you accept to take part in the short interviews, you will be asked to sign a consent form to show that you have agreed to take part. You are free to withdraw at any time without giving a reason.

Expenses and Payments

There will be no monetary payment for expenses or participation in this study.

Benefits, Risks and Discomforts

There is no direct to benefit to you or your practice, however It may be that having an opportunity to take time out and discuss and reflect on your practice, is a therapeutic experience for you. The researcher cannot promise that this study will help you personally, but your valuable thoughts and experiences could be used to inform and develop strategies to support general practice in the future.

Confidentiality

Confidentiality will be maintained unless during the interview the participant raises an issue about patient safety, which is not resolved. You will not be identifiable from conversations, which take place during the interview and are later published.

How will my data be kept confidential?

All information collected through the interviews will be stored on a computer with a secure firewall and password protected and paper transcripts in a locked cabinet for 10 years.

What will happen to the results?

The data will be examined and used as part of a PhD study. The results of the research will being used to inform the development of guidance for general practice. Results will be published in peer reviewed journals and presented at educational and subject specific conferences.

You will be sent a summary of the findings of the project.

Who is organising and funding the research?

This work is part of a PhD study with Manchester Metropolitan University

Who has reviewed the study?

The research proposal has been reviewed and given favourable opinion by the MMU Faculty Research Ethics Committee.

Complaints

If you have a concern about any aspect of this study you should speak to the researcher who will do his best to answer your question. He can be contacted on 0161 247 2977. If you remain unhappy and wish to complain formally you can do this by contacting

1. Dr Kirsten Jack, Senior Lecturer and Director of Studies, Manchester Metropolitan University, Birley Building, Birley Campus, 53 Bonsall Street, Manchester, M15 6GX, k.jack@mmu.ac.uk
2. Professor Juliet Goldbart, Director Research Institute for health and social change, Manchester Metropolitan University, Birley Building, Birley Campus, 53 Bonsall Street, Manchester, M15 6GX, J.goldbart@mmu.ac.uk

Further Information and contact details

Further information can be obtained by contacting
Neil Wilson 0161 247 2977
Neil.wilson@mmu.ac.uk

Appendix 3

Questionnaire

An anonymous survey of COPD and Nutritional Care (Stage 1)

To be completed by the lead nurse responsible for the care of COPD patients (One survey per practice)

An exploration of the current knowledge and attitudes of General Practice Nurses in relation to the nutritional needs of patients with COPD.



Please tick <u>ONE</u> of the boxes provided, unless otherwise stated.		
1. How many general practitioners work in your practice?	Full Time	Part Time
2. How many registered nurses work in the practice?	Full Time	Part Time
3. What is the practice list size?		
<input type="checkbox"/> < 2000 <input type="checkbox"/> 2000-3999 <input type="checkbox"/> 4000-5999 <input type="checkbox"/> 6000-7999 <input type="checkbox"/> > 7999		
4a. Does your practice care for patients with COPD?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4b. If yes, what is the approximate percentage number of patients per practice list?		
<input type="checkbox"/> < 5% <input type="checkbox"/> 5-10% <input type="checkbox"/> 11-20% <input type="checkbox"/> 21-30% <input type="checkbox"/> > 31%		
5a. Are patients with COPD regularly reviewed by the nurses within the practice?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
5b. If yes, is this generally?		
Ad-hoc basis <input type="checkbox"/> Formal clinic running regularly (set number of COPD patients) <input type="checkbox"/>		
6. What is your role in relation to caring for COPD patients?		
Basic: the nurse does not autonomously confirm diagnosis or autonomously give follow up care		<input type="checkbox"/>
Intermediate:		<input type="checkbox"/>
(i) The nurse autonomously confirms diagnosis (but does not autonomously provide follow up care)		
(ii) The nurse autonomously gives follow up care (but does not autonomously confirm diagnosis)		
Advanced: The nurse autonomously confirms diagnosis and autonomously gives follow up care		<input type="checkbox"/>
7. Who primarily sees these patients for general COPD review?		
GP <input type="checkbox"/> Registered Nurse <input type="checkbox"/> Support Worker <input type="checkbox"/> Other (please specify below)		
8. At these reviews, do you undertake or recommend? (Tick all that apply)		
Spirometry <input type="checkbox"/> Blood pressure <input type="checkbox"/> Blood tests <input type="checkbox"/> O2 saturations <input type="checkbox"/> Vaccinations <input type="checkbox"/> Inhaler technique <input type="checkbox"/> MRC Scale <input type="checkbox"/> Referral Pulm Rehab <input type="checkbox"/> via T2 Steroids <input type="checkbox"/> Antibiotics <input type="checkbox"/>		
9a. Have you access to a pulmonary rehabilitation service?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
9b. If yes, are you able to autonomously refer a patient?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
10a. Do you nutritionally screen COPD patients?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
10b. If yes, how? (Tick all that apply)		
Weight only <input type="checkbox"/> Validated Nutritional Screening Tool <input type="checkbox"/> Using Weight and Height (calculating BMI only) <input type="checkbox"/> Other (please specify below)		
11. If you use a nutrition-screening tool, is it?		
MUST <input type="checkbox"/> MUST + other tool <input type="checkbox"/> Local tool (validated) <input type="checkbox"/> Local tool (un-validated) <input type="checkbox"/> Nutrition Risk Score <input type="checkbox"/> Other <input type="checkbox"/> Unknown <input type="checkbox"/>		
12a. Do you take blood samples specifically to identify nutritional deficiency?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
12b. If yes, what are these? (Tick all that apply)		
FBC <input type="checkbox"/> Iron <input type="checkbox"/> Ferritin <input type="checkbox"/> Magnesium <input type="checkbox"/> Folate <input type="checkbox"/> B12 <input type="checkbox"/> Renal <input type="checkbox"/> Hepatic <input type="checkbox"/> Phosphate <input type="checkbox"/> Vit D <input type="checkbox"/> Bone Density <input type="checkbox"/> Selenium <input type="checkbox"/>		
13a. Do you as a nurse offer dietary advice for your patients with COPD?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
13b. If yes, does this principally relate too?	Weight gain <input type="checkbox"/>	Weight loss <input type="checkbox"/> Both <input type="checkbox"/>

14. If you believe dietary changes for your patients with COPD are necessary, how would/did you obtain the advice/information? (Tick all that apply)		
Through your initial nurse training (pre-reg) <input type="checkbox"/>	From a post registration course <input type="checkbox"/>	Textbook <input type="checkbox"/>
Leaflet (from an NHS/Charity provider) <input type="checkbox"/>	Leaflet (created by the practice) <input type="checkbox"/>	Website/internet <input type="checkbox"/>
Dietetic support / referral <input type="checkbox"/>	Local practice policy <input type="checkbox"/>	Other (please specify below)
15. If dietary changes are aimed at weight gain, do you recommend? (Tick all that apply - If you do not offer any formal nutritional advice please go to Q16)		
Eating little and often <input type="checkbox"/>	Food fortification <input type="checkbox"/>	Complan or build up shakes <input type="checkbox"/>
Prescribable oral supplements <input type="checkbox"/>		
Other (please specify below including referral to dietitian to obtain any of above)		
16. If oral nutritional supplements are prescribed, what monitoring do you offer/undertake?		
17. What education have you had in relation to nutritional care? (Tick all that apply that may include treatment of malnutrition, nutritional screening, use of supplements, Nutrition and COPD)		
Part of your nurse training <input type="checkbox"/>	Post qualifying course (that included nutritional content) <input type="checkbox"/>	Specialist module in nutrition <input type="checkbox"/>
Study Day <input type="checkbox"/>	Industry representative visiting surgery <input type="checkbox"/>	None <input type="checkbox"/>
18. Do you hold post registration qualifications?		Yes <input type="checkbox"/> No <input type="checkbox"/>
19. What is the highest academic qualification you hold? (e.g: Diploma, BSc, Community Specialist Practitioner/GPN, MSc, PhD)		
20. What year did you qualify as a nurse?		
21. What year did you commence your practice nurse post?		

Thank you for your help completing this questionnaire, please return the form in the envelope provided.

¹ The inclusion of all the listed blood biochemistry in Q12b is intended to provide a broad range of blood tests related to general health assessment not just nutritional status. explore indepth knowledge of nutritional

Appendix 4

Invitation to Participate

Version 2 07th August 2014



Invitation to participate in short interviews

I am a researcher involved in the following project:

Exploring the current knowledge and attitudes of Practice Nurses relating to nutrition and COPD

The focus of this project will be to explore the current knowledge and attitudes of practice nurses in the nutritional care of COPD patients. We know from the evidence that patients living with COPD can experience difficulties in maintaining nutritional status throughout their journey. We want to be able to better understand the role of the practice nurse in the care of such patients and explore knowledge and attitudes towards nutritional support.

This project has a two stage approach involving an anonymous questionnaire and interviews. If following the completion of the questionnaire you would agree to be interviewed (at a place and time of your convenience) for no more than 60 minutes, please complete the form below and place in **the envelope with your completed survey**. Thank you in anticipation of your support.

I wish to receive further information regarding stage 2 of the study which involves a one off interview ☐

*If you do **not** wish to receive any further information about this study, please discard this invitation for stage 2 of this study.*

Name _____

Contact number and/or email address _____

Researcher:

Neil Wilson
Senior Lecturer
0161 247 2977
Neil.wilson@mmu.ac.uk

Appendix 5

Consent form

Version 1 – April 2014



Consent Form

Manchester Metropolitan University

Title of Project: An exploration of the current knowledge and attitudes of General Practice Nurses in relation to the nutritional needs of patients with COPD

Name of Researcher: Neil Wilson

This form is designed for you to use to help decide whether or not you would like to take part in the study. Please fill it in after reading the information sheet provided.

Please initial box:

		Initial
1	I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2	I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.	
3	I agree to the interview being audio recorded and transcribed.	
4	I agree to anonymised quotes in publications.	
5	I agree to take part in the above study.	
Name/Date:		
Signature:		
Name of person taking consent /Date:		
Signature:		